Lectures on DISEASES OF THE NERVOUS SYSTEM.

Delivered at the Westminster Hospital,

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LECTURE II.

Gentlemen,—In my first lecture I tried to give you a general picture of the morbid proclivities of the nervous system, that you might understand from the first which are the most frequent and which the most important kinds of disease to which it is liable.

I have now to enter on the consideration of particular nervous diseases; and in the first place some kind of classification is necessary. It must be confessed, however, that we can hardly make any philosophical arrangement of our subject: it is necessary to sacrifice logical method almost entirely to convenience of description. It is convenient, for instance, to separate the diseases of the brain (including the whole encephalon) from those of the spinal cord; and these, again, from diseases of the nerves. But you will easily discover that this arrangement is far from possessing strict logical correctness. Moreover, besides the diseases which can with something like accuracy be assigned to one or other of these divisions of the nervous system, there is an exceedingly large class in which either the seat and character of the morbid process are unknown, or else the morbid changes are of the nature of a slow alteration, diffused more or less throughout the centres.

It is with the latter class of nervous diseases that I propose to deal first. It includes, beyond doubt, the majority of those nervous disorders which in practice occasion us the largest amount of trouble and anxiety, and which we too often find ourselves without any power to cure, or even to effectively control.

I. *Functional and unlocalised diseases of the nervous system.* The first place in this class would properly be assigned to the psychoses—the various forms of insanity. You are aware, however, that the subject of insanity is so large and of such immense importance that by common consent it has come to be treated as a special subject; and my colleague, Dr. Sutherland, delivers annually a course of lectures thereon. Only one form of insanity will be particularly dealt with by me, and that form does not come under the class of diseases we are now considering; I refer to general paralysis of the insane, which is definitely connected with a special inflammation of the brain-cortex, and will therefore be described among the organic affections of the brain. Excluding the psychoses proper, then, we have still a considerable number of diseases under our present heading; and I propose to further subdivide them as follows:—

The first group, which we will call *A*, is made up of diseases which are immediately produced by the action of an external cause, a physical agent which affects the blood and impairs the nutrition of the nervous tissues. These are sunstroke and the chronic nervous poisonings.

B. The second group consists of diseases of which the cause is still partly external, but which are also in great part due to internal spontaneous processes in the nervous centres—processes which for the most part cannot as yet be connected with any characteristic organic change. Under this heading we shall consider hypochondriasis; hysteria of the ordinary types; the so-called "spinal irritation"; muscular anæsthesia (and some other, but vaguer, analogous affections); chorea; writer's cramp; and the convulsions of infancy.

C. In the third group are reckoned a number of diseases in the production of which there is scarcely any action of a recognisable external cause, and which are plainly dependent, in by far the largest degree, on an inherited organisation of the nervous centres, which causes them to break down in a special manner under certain of the ordinary physiological strains which a normal organism would sustain without injury. They include simple epilepsy,* paralysis agitans, wasting palsy, and a particular form of catalepsy.

D. There is yet a fourth group, composed of nervous affections which, though important enough to compel us to treat them as substantive diseases, are really but incidents in diseases of other organs. Under this head we reckon two kinds of vertigo—the stomachal, and the so-called "essential" which depends on weak and probably dilated heart,—the reflex brain disturbances that accompany difficult involution of the uterus at the menopause, &c.

A. To-day, then, we are to consider those of the generalised nervous diseases which are directly dependent on the action of an external physical cause. They comprise, we may say, one acute and several chronic forms of poisoning of the nerve-centres.

1. Heat-stroke may be described, without impropriety, as acute poisoning of the nerve-centres with superheated blood. It is, of course, a chiefly tropical disease, but there is never a summer passes, even in this and other temperate climates, without several severe, and a great many of the milder, cases occurring; and it is important that you should understand that heat is the real origin of a number of illnesses, especially in children, which are rarely ascribed to their true cause.

The typical circumstances in which heat-stroke occurs are, the fatiguing marches of troops through the heat of the day, in a tropical climate; or the incautious over-exertion to which tiger-hunters will expose themselves under a similar sun-heat. It is by no means necessary, however, to encounter the direct rays of the sun in order to get heat-stroke. In fact, some of the most disastrous outbreaks of the malady have occurred among soldiers packed in overcrowded dormitories, or overcrowded ships, and case after case has happened in the night; and when once the temperature of the air is raised to an extreme height, it is certain that the foul atmosphere of crowded rooms or cabins is a powerful aggravator of the effects of mere heat. Stripped, however, of the accidental features which are thus sometimes introduced, heat-stroke essentially offers the phenomena of an acute paralysis of the nerve-centres generally, bearing with more or less of dangerous force upon the centres of respiration and of heart-movement. Two clinical forms are recognised by the authorities—the cardiac, and the cerebro-spinal. In the former, the course is rapid and the issue fatal almost from the necessity of the case; in the latter, there is far more chance for life, and at any rate the end does not come so soon.

In the cardiac variety there may be no preliminaries whatever: in an English instance that came within my own knowledge (though not under my care), a labourer, making hay, was working with full vigour when he fell forward on his face, and immediately turned over on his back; his eyes were wild and staring, he gave one or two sobbing inspirations, and died. It was conjectured at the moment that there must be cardiac disease, or else extensive cerebral hæmorrhage, but post-mortem examination showed the heart to be healthy, and the brain free from any mischief except a trifling congestion. The skin just before death felt intensely burning to the touch, and remained so for some time after death. There are plenty of such cases recorded by Indian medical authorities. Sometimes, however, there is a short initial period, in which the patient is conscious of rapidly-increasing and oppressive bodily heat; the skin is dry and burning, the conjunctivæ congested, the patient's look is wild, and he complains of a feeling of distressing tension in his head, then suddenly there comes a fainting collapse, or a succession of faints, and death.

In the cerebro-spinal variety, which is the commoner, there is usually a distinct train of preliminary symptoms. Not only are there the sensations already described, but very commonly there is mental derangement, usually of the nature of hallucination; the patient is more or less delirious, and his talk is of some imaginary assailant, or of imaginary

* By this is intended epilepsy that is not dependent on syphilis, or on traumatic lesions, or on alcoholism, and is not a mere part of the closing scene in chronic degenerations leading to generalised sclerosis.

scenery, &c. Occasionally he becomes dangerously furious, and homicidal or suicidal. A very common occurrence is that of frequent micturition. After a short time the patient becomes drowsy, lies down, and passes into a state of coma with stertorous breathing; the insensibility becomes more and more profound, the conjunctivæ more congested, but with a pink tint, the action of the heart tumultuous, the radial pulse quick and sharp and (if the case is going to end badly) very compressible; in many cases there are general convulsions, but in many others the patient lies motionless from first to last, and simply sinks out of life. In some cases of the cerebro-spinal form the symptoms of the cardiac variety are also present, and the patient's death is partly due to syncope.

Such are the phenomena of the more characteristic forms of heat-stroke as they are described by various Indian surgeons, and well summed up in the able article of Dr. Maclean (Reynolds's System of Medicine, vol. ii.), who has himself had abundant experience of the disease. But I desire to call your attention to another form of the disorder, the true nature of which is very commonly ignored. It occurs in infants and young children, and, like the more typical varieties as observed in adults, may be equally produced by exposure to direct sun-heat, and also by extremely high temperature in bedrooms or nurseries, but only when the temperature of the general atmosphere is high. Under these circumstances the perspiratory action of the skin, which may up to that time have been excessive, suddenly ceases, and is replaced by dry burning heat of the surface. This is soon followed by further disturbance which most commonly takes the form of *diarrhœa*—an interesting circumstance, because acute heat-stroke in the adult is nearly always accompanied by obstinate *constipation*. Unless the moisture of the skin be speedily restored there is very soon profound affection of the nervous centres, which usually takes the form of general convulsions; between the attacks the patient lies listless, with closed eyes, or absolutely comatose. He may either sink away in profound coma, or (which I have known happen in several cases), may suddenly start up in the nurse's arms, with blanched face and dilated pupils, take two or three gasping inspirations, and die in syncope. Now these attacks very commonly occur in infants who are teething, and I fear it is sadly frequent for the whole blame to be laid on dental irritation, the poisonous action of superheated blood being ignored, and the whole treatment being directed to the relief of a supposed tension of the gums, and to quieting the nervous system and checking the diarrhœa by sedatives and astringents. A far more excusable mistake, and one which it is sometimes impossible to avoid, is the supposition that the child is labouring under the early symptoms of a specific fever.

The etiology and pathology of the affections which we group under the title of heat-stroke are quite sufficiently known so far as they have any bearing on the practical management of the disease; though, doubtless, much remains to be discovered as to the intimate changes that occur in the nervous tissue. Those of you who heard me lecture last winter on the febrile diseases will remember I dwelt particularly on the discoveries which have been made, in late years, as to the powerfully devitalising action which the blood, when heated beyond a certain point, exerts on all the tissues of the body; its most acutely dangerous effects being exerted upon the nervous centres.* In whatever way produced, this abnormal temperature cannot rise beyond 107° Fahr. without being exceedingly dangerous, or (probably) beyond 108·6° without being certainly fatal, unless it be speedily reduced by artificial means. The particular mode in which the superheating of the blood is accomplished in heat-stroke cannot be fully explained, since we do not know the manner and extent to which the heat-regulating nervous centres participate in the process; but it seems highly probable that the direct action of excessive heat on the skin has the largest share in the business, by paralysing the sweat-glands. The perspiration, as you know, by the constant evaporation it produces, is the main source of a constant loss of heat, which prevents the temperature of the blood from rising unduly high: its sudden arrest, while heat is pouring into the body from an overheated atmosphere, is therefore sufficient to account for a large rise of the general temperature of the blood. It may be added that the foulness of the air in crowded and ill-ventilated dormitories, &c., probably aids in suppressing the skin function.

Moreover, it would doubtless be wrong to assume that the subsequent phenomena are wholly due to the mere effect of superheated blood upon the nervous centres; the action of the overhot blood causes a rapid destruction of many different tissues of the body, and the effete relics of this wasting process accumulate in the blood in default of the customary depurating action of the sweat-glands; and this may add somewhat, though not so much as many authors have supposed, to the toxic action of heat pure and simple. It should be mentioned also that in all those cases where, from improper dress (e.g., the tight coats and cross-belts of soldiers under the antiquated system), the chest is compressed and the action of the lungs impeded, both the cooling and the depuration of the blood are additionally interfered with.

The general principles of the treatment of heat-stroke would thus appear to be very plain; and, fortunately, experience bears out the conclusions of common sense. In the first place, we must remove the patient instantly to a cool place, and strip him. In the cardiac variety, with syncopal tendencies, we are confronted with the danger of instant death, and our first care is to rouse the action of the heart and the respiratory muscles; accordingly we place the patient in an empty tub or hip-bath, and pour canfuls of the coldest water we can get over his neck and shoulders and chest, place ammonia to his nostrils, and (if he can anyhow swallow) pour small quantities of half and half brandy and water down his throat. Once the immediate danger from syncope is over, our next care is to carry out a rapid reduction of the temperature of the blood, and for this purpose we either repeat the cold douche at short intervals, or "pack" the patient in a sheet dipped, and frequently redipped, in water with lumps of ice in it, or put him in a bath of water of 90°, which we then cool down (by the addition of ice or cold water) to about 62° in the course of twenty minutes or half an hour. The duration and frequency of repetition of either of these means of applying external cold must be regulated by the frequent use of the thermometer, the point being to keep the bodily temperature at least as low as 102°, but never to reduce it below 97°. Often it will rise again and again, during several hours, and we ought never to be satisfied till it stands permanently at not more than 99°. It is necessary, however, to bear in mind the caution, given by some of the best Indian observers, not to persist with the douche when it produces a clammy state of the skin, with sighing respiration; and if, for these or other reasons, we cannot apply continuous external cold, it becomes necessary to think of other measures for reducing the temperature. We may try Dr. Parkes's plan of injecting iced water into the rectum, or we may try to get the skin to act again by medicines. Dr. Maclean says that nothing in this way is so powerful as the secret medicine called Warburg's tincture; but if we should be unable or unwilling to use this, it is probable that the tincture of aconite will effect all that it could do, for aconite is an exceedingly powerful sudorific. It should be given in the method of small doses very frequently repeated; a single drop of the tincture every five minutes at first, and afterwards at intervals of ten minutes, twenty minutes, an hour, &c. In this way you get a strong and continuous action on the skin without provoking toxic cardiac symptoms. The patient must be supported from the first with frequent food and small doses of brandy (two drachms every hour).

The cases attended with convulsions have been found to bear the douche very ill; it irritates and exhausts them too much. I suspect it would be better to apply the whole bath gradually cooled down in the manner already described; but chloroform should be previously given, in just sufficient quantity to still the spasms, for which purpose it has been found very useful.

It is easy to make up one's mind to the simple and rather heroic line of treatment above described in the instances of adults attacked with the typical form of heat-stroke; but it is not so easy to carry out, with determination, a similar method for children and infants attacked with the heat-

* In publishing these lectures (necessarily much condensed) I think it would be waste of space to enter at large on the subject of hyperpyrexia, which has of late been so repeatedly and fully brought before the notice of the profession.

stroke—diarrhœa with convulsions or coma. Yet this is doubtless the true principle to go upon, and I have acted upon it with great success in three instances,—in two of these by the application of external cold (once douche, once cooled bath); in the other, the child seeming very feeble, I employed tincture of aconite in the numerous small doses above described,—and the general impression left on my mind is, that the old routine treatment of infantile summer and autumn diarrhœa ought to be entirely abandoned in the cases where there is pungent, dry heat of skin, and the evidence of previous great exposure to heat. And it may now be said, from accumulated experience, that this treatment would do no harm even if by chance it happened that the disease were not heat-stroke, but the early stage of some specific fever,—provided, of course, that the cooling process be carefully guarded by the constant use of the thermometer.

The prophylaxis of heat-stroke rests of course upon very obvious principles, though these are constantly neglected in this country. The national craze for sending all children, indiscriminately, to the seaside, where they fry upon the hot sands all day long without adequate covering either for head or neck, leads to a considerable amount of mischief of this kind. On the contrary, in India and other countries where heat-stroke would otherwise be very common, the inhabitants readily protect themselves by loose garments of non-conducting material, and especially by light but thoroughly non-conducting coverings for head and spine, from the effects of direct exposure to the sun. Of equal importance is the avoidance of overcrowding and bad ventilation of sleeping-rooms in hot weather. But it should specially be remembered that great fatigue is a most powerful additional predisposer to heat-stroke, and that very much less of actual exposure to high temperature will produce the latter in a previously exhausted than in a comparatively unfatigued man.

One of the most important matters on which I would dwell, however, is the *sequelæ* of heat-stroke. There may be no such consequences, but there very commonly are; and some of these are very serious, and require to be dealt with in a particular manner. One of the commonest sequelæ is epilepsy; and there are some cases of epilepsy after sunstroke that are very mild. It is to these, probably, that Dr. Maclean refers when he says that epilepsy after sunstroke is usually curable merely by removal to a milder climate. But there is a very considerable number of instances—at least, I judge so by having met with several myself—in which genuine heat-stroke was followed by a few attacks of epilepsy, which almost or altogether ceased on the patient's arrival in England; nevertheless, there remained behind a state of brain which was altogether peculiar. In the first place, these patients nearly always showed marked impairment of memory, though that impairment might be very unequal as regarded different sorts of memory. Secondly, they are often intensely irritable, and it is not safe to calculate their probable conduct under certain strains and provocations on the same principle as you would calculate that of ordinary folk. Thirdly (and I beg you to bear this especially in mind), a man who has once had genuine heat-stroke is almost always quite unfit to be allowed to taste a single drop of alcohol; that substance has become a deadly poison for him, and even its moderate use, if persisted in, will very likely reduce him to a condition of insanity. Let me warn you, however, that you must not too lightly accept the assertion that a patient "has had a sunstroke;" many who say this have never so suffered at all, but have been *drinkers*, or have had syphilis with tertiary symptoms affecting the brain; and both these causes indefinitely heighten the tendency to subsequent mischief, and also the morbid irritability to alcohol. The mildest cases even of genuine sunstroke require much after-care. The skin, as Dr. Maclean shows, is long in recovering its activity of function, and it is very necessary to hasten this recovery by very diligent frictions, baths, and shampooing. The bowels often remain obstinate, and sometimes even a course of faradisation (negative pole in rectum) will be advisable, in order to assist in restoring their tone. Obstinate *headache* is also sometimes a very troublesome and intractable sequel of heat-stroke. Dr. Maclean says that iodide of potassium and prolonged counter-irritation to the nape of the neck sometimes relieve; but sometimes, also, nothing appears to do any good. I am inclined to believe that a rather prolonged course of cod-liver oil offers the best chance.

I shall next pass on to consider the chronic poisonings, of which only three—alcoholism, plumbism, and mercurialism—so specially and separately affect the nervous system as to deserve notice in a medical rather than in a toxicological treatise.

ABSTRACT
OF
Clinical Lectures
ON
SURGERY.

Delivered at Guy's Hospital during the Session 1871-72.

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LECTURE VI.

ON LITHOTOMY AND LITHOTRITY.

GENTLEMEN,—You have just now seen me operate upon two patients for the relief of a malady common to both cases—namely, stone in the bladder,—but on whom it was necessary and proper to adopt different surgical proceedings for the attainment of the desired end. In the first (a child) I performed the operation of lithotomy, or cutting for the stone; in the second (an old man), that of lithotrity, or the crushing operation. These two cases will form a fit text at the commencement of our sermon to-day, and here are the reports.

CASE 1.—John W——, aged three, living in the Borough (it is interesting in these cases to note the habitat of the patient), was in good health till he had the whooping-cough, five months ago. It was then noticed that he had difficulty in passing his water. The stream would suddenly stop in its flow, and as suddenly commence again; and at such times he would cry and seem to be in much pain. Apparently also his suffering was greater when he had finished passing his water—that is to say, when the bladder was empty. Advice was first sought at another hospital three or four months ago. He was sounded every week for six weeks, and, no stone being detected, it was thought that possibly some inflammatory mischief might exist about the bladder. The child did not improve, so he was brought here. No history can be obtained of any similar condition in the family, past or present. His parents are neither gouty nor rheumatic. On admission, he has inability to hold his water, but no other urinary symptom: the whole history of his present condition may be summed up in the one word, "incontinence." A sound was passed soon after his admission, and a stone of moderate size detected at once. He has since continued to play about the ward daily without any pain, and he is in very good health in other respects. No urine can be obtained for examination, as the bladder cannot retain it.

CASE 2 is that of George S——, aged sixty-three, labourer, living at Pewsey, in Wiltshire. There is no history of gravel or gout in his family. In reply to our questions he told us that he was quite well till fourteen years ago, and that his first symptoms of anything wrong were a stoppage in the passage of his water and a desire to micturate every few minutes. He noticed no deposit in his urine at that time, but he had much pain over the bladder. He was unable to pass any water for some time, but the next day he was quite well again, and so continued. He does not think he passed any stone at that time. At the end of a year or two he began to be bad again in the same way, and again he got quite well. He, however, after the second attack, continued to pass blood on and off, generally two or three times successively when it once began, and then, may be, the urine would remain clear for a week or two, or perhaps two or three months. Four years ago he passed a small stone by the urethra, and again a year and a half afterwards another, but smaller one, and throughout the four years he has never been free from trouble

with his urine. Blood has passed at times, and this has generally increased with any excess of labour or exercise. The urine varies at times; it has been very thick, at others again comparatively clear. Pain, also, is a fluctuating symptom; sometimes it is so severe that walking hurts him exceedingly, at others he feels nothing. Five weeks ago an instrument was passed by my friend Mr. Barrett, of Pewsey, and a stone was felt. He had had nothing done for him before, save the administration of medicine. The urine is rather thick, but not offensive. It contains pus. He was ordered some bicarbonate of potash with tincture of opium three times a day, and on Nov. 30th I examined him, on going round the wards, with an ordinary sound, and thought from the impression communicated to the finger, that the stone was a large one, and, if so, that it would be unsuitable for lithotrity. On Dec. 4th I examined the size of the stone with a lithotrite. This, you will see, is done by a gauge in the lithotrite handle, which registers the extent to which the blades are separated. The diameter of it when first caught measured one inch and a quarter; the second time it measured an inch. Having ascertained its magnitude, I proceeded to crush it, and did so in all six or seven times. The whole operation lasted about ten minutes, and appeared to cause excessive pain, otherwise there was nothing unusual to note. Since that time the crushing has been repeated twice, and though during the operation the pain is severe, it passes off almost immediately the instrument is removed. A chemical examination of the stone shows the calculus to be composed of lithic acid, and I may say that it is rather unusually hard for one of this kind.

Here, then, we have two patients at the opposite extremes of life—an old man living in the country, and a young child in the metropolis; the one living, it must be said, under totally dissimilar conditions to the other, and yet each is affected by the same disease. Can we explain this fact in any way; and are there any reasons for supposing that habits of life have any, and, if any, what, influence upon the formation of a stone in the urinary tract or bladder? To answer this question, I may tell you that it has long been asserted, and I believe with truth, that in the county of Norfolk the number of cases of stone in the bladder is larger than in other parts of England. It is also certain that most of the adults who suffer from this disease, no matter from what part of this island they come, are men who have lived in rural districts, and not in large towns. The patient whom you have seen lithotrised to-day comes from Wiltshire. Now, whether the people of Norfolk live under special conditions which render them peculiarly liable to stone, I do not know; but, at any rate, they, in common with all country labourers, and my patient amongst the number, live mostly on vegetable matters, and get but little meat. It is stated in books that the gouty and highly fed are more subject to calculus; but these facts seem to me to prove very much the opposite, for here we have a man, almost a vegetarian, and who is underfed rather than overfed, and yet he has a stone; and, as I say, this is, in my experience, the common order of things. So unused is this patient to a meat diet that, since he has been in the hospital, he has become quite upset, and has completely lost his appetite, owing entirely, as he expresses it, to his being "surfeited" with so much animal food. To support the point which I am endeavouring to impress upon you, that vegetable diet tends to the production of gravel, stone, and such disease, while a meat diet is their prophylactic, the case of the child may be adduced, as one of many which occur at an age when farinaceous and starchy kinds of food are in excess, while meat forms but a small proportion of the daily nutriment.

But I must pass on to the question which you, as students, are most anxious to ascertain—What are the symptoms of stone? These may be divided into the subjective, or those the patient feels; the physical, or those the surgeon ascertains by means of his sound; and those derived from an inspection of the urine.

First, the subjective symptoms, what are they? Foremost of them must be placed pain, and this will vary in its site with the age of the patient. In an adult it will generally be felt in the region of the pubes and over the bladder, but in a child it is all at the extremity of the penis. To ease this he will be constantly pulling at the prepuce, which soon becomes considerably elongated, and this often proves of some little help to the surgeon in suggesting by its appearance the disease which it is his business to diagnose. Next must be mentioned arrest of the flow of urine. So marked was this symptom in the old man that he had, according to his own account, absolute retention for some hours. In a child, however, it is often not much noticed, the fact being that, unlike adults, in whom pain causes quietude, young people are ever on the move, and either from straining, or crying, or tumbling about, the stone, which has been forced by the onward gush of urine against the vesical orifice of the urethra, like a ball and socket valve, soon falls away again and allows the water to pass. Thirdly, you will notice that there is a frequent call to pass water, in children amounting to complete incontinence. In grown-up persons this frequent micturition is by no means necessarily due to the presence of a stone; on the contrary, it is a symptom of many if not all diseases of the bladder or urethra—such as stricture, cystitis, prostatic affections, and even rectal disease. In young children, also, it does not in many cases indicate disease, because they are in the habit of passing urine at most unseasonable times, and their bladders have not yet been educated to retain any large amount of fluid. Still, taking care to preclude such sources of fallacy, if there is one symptom more than another which would lead me to pass a sound into the bladder, and to say almost before I had done so that the patient had a stone, it is this: when a child or adult, in good health previously, suddenly begins to have frequent micturition or incontinence. Mark you, there is an incontinence at an early age which means nothing of this kind; I refer to those cases which may be called transient incontinence, or where children pass their urine into the bed at night, or only at certain times.

Taking next the signs obtained by an inspection of the urine, you may find that blood is mixed with it. It was markedly so in the case of the man, but not so in the child. It is by no means a constant symptom, but when present in addition to others it adds certainty to the diagnosis. It is also not a continuous symptom; it comes once or twice, and then disappears again; and it is generally increased by any rough exercise, such as jolting in an omnibus or on horseback, or by running. In children such jolting is usually caused by an energetic nurse, who, seeing that the child cries as if in pain, takes it up and dances it about or shakes it to relieve the suffering, the consequence of which is that the conditions producing the bleeding from the bladder are considerably aggravated, and I have seen intolerable pain produced entirely from such treatment.

Again, mucus or pus will always be found if looked for at some time during the disease. Look doubtfully on all those cases in which a few symptoms of stone are present and yet the urine always remains clear; I should say in such a case, without going further, look to other causes for your symptoms, for the patient has not a calculus. On the other hand, if you find mucus or pus in the urine, though only occasionally, especially in a child, you may and ought to pass a sound.

Prolapsus of the rectum is another valuable symptom, which I have no hesitation in saying is almost a constant one in children. It is due to the continual straining caused by the irritated bladder and to the frequent attempts to void urine, which perhaps it may not at the time contain. All these things, taken together, will, if present, justify you in adopting the last means of diagnosis, and eliciting by the passage of the sound the physical symptoms, which are of all the most unfailing.

Now, if you get as far as this, gentlemen, do not use an old-fashioned instrument made somewhat after the style of what you know as a "prostatic catheter," but always take a sound with a very short beak. Here is one, for instance, which you will notice resembles very much the lithotrite in its form. With one of this kind you will find that in all children you will strike the stone very easily. In old people there may be some difficulty; but even if there be, it is rendered much less likely to occur with the instrument such as I have shown you. To take a case in point: it is by no means uncommon to have to sound a patient for stone who also has a large prostate; and, if a calculus be present, the chances are that it will be found in the pouch immediately behind that organ. It can then only be struck by turning the beak downward, so that the end may pass into the recess in which the stone lies. What would you do if you had an instrument with a large curve? Turn it downwards

you could not, and hit the stone without probably you could not; while, if the unfitness of the instrument for the special case had not crossed your mind, it would probably be withdrawn without finding anything, and you would treat the patient for something else till he had grown tired of his non-improvement and had sought the advice of some abler man. Many a stone has been missed behind the prostate simply because the old instruments could not strike it in that position. This leads me on to another point, which is, that a stone may be struck at one time and not at another. You will have noticed that the child had been sounded six different times at another hospital, and the stone was not felt; and when we come to look at the stone, we see that it must have been in the bladder for a very long time. I take it that a stone of this size ($\frac{3}{4}$ in. × $\frac{3}{4}$ × $\frac{1}{2}$) has been forming much longer than four or five months, the period during which the symptoms have existed. Now it is absurd to suppose that in any hospital the surgeon does not know how to sound a child and detect a stone. It is a proceeding which does not require much art, and any of you would be able to do it easily enough after having passed a catheter a few times. If, then, this boy was sounded so many times and no stone detected, it could only be that for various reasons calculi, even of considerable size, cannot always be felt. The reason that it escaped notice in this instance I believe to be owing to a very closely contracted condition of the bladder, and which caused a little delay in extracting the stone at the time of the operation. This was not because the stone was small, and it was not because my incision was too limited, for having once grasped the stone it came away easily; but it was because the bladder was perfectly contracted, and contained no urine. If a sound is passed into the viscus in this condition, it will have no room to play, and very likely will become entangled in the folds of mucous membrane without once reaching the surface of the stone.

In addition to the stone from which this little boy suffered, I would ask you particularly to notice another feature. He has a prepuce which is adherent to the surface of the glans. This condition is important, because it is capable of producing many most marked symptoms of calculus. Indeed I think I would go so far as to say that in nine-tenths of the children brought to you for incontinence this symptom will be owing to the adhesion between the prepuce and glans. Knowing this, and seeing that the child had such a condition, it perhaps might have been as well to have separated the surface of these parts before proceeding to pass a sound. We should, however, have then had to wait to ascertain if the symptoms subsided. The boy, however, came under my notice as one in whom the presence of stone had been already settled, and therefore it was not necessary to wait; but I shall take care that circumcision is performed before he leaves the hospital to ensure his freedom from trouble hereafter; and I would advise you, whenever a case of suspected stone is brought to you, always to inspect the prepuce first, and if it be adherent, to separate it before you attempt to pass a sound.

In sounding adults whom in all probability you will, should you detect a stone, determine subsequently to lithotrise, you will find it a better plan not to do as I did in this case, for a special reason—viz., pass an ordinary sound first,—but pass a lithotrite at once. It is not more difficult of introduction, and you can detect a stone with it as easily as by a sound. It drops into the bladder almost by its own weight, and you can then, should a small stone be there, if there be no indication to the contrary, crush it at once. I have pursued this plan in private practice, and only the other day a gentleman came to my house with symptoms of calculus, for whom I passed the instrument, caught the stone, and crushed it at once. The stone being broken, he was, therefore, so far on his way to being relieved of his malady. I always, where possible, use the non-fenestrated blades, that the fragments may be more completely crushed, and for convenience I know of no instrument so perfect as Weiss's lithotrite, in which, by merely sliding backwards or forwards a button in the handle, the screw on the inner blade is at pleasure fixed or set perfectly free, to allow of a sliding motion on the outer blade.

I need hardly say much as to the choice of operations. You know as well as I do, that in adults, if the stone be not too large, or the bladder symptoms too intense, crushing should always be undertaken, because it is much less fatal than the cutting operation. In children, on the other hand, lithotomy is so satisfactory that one could hardly improve upon it by any other method.

I have cut a good many cases in children now, and, with the exception of a single painful case in my earlier years, all have been uniformly successful. All men have some accidents in their less skilful days of commencing practice, and I do not believe in that man who never makes any mistake. Let us only be honest, and relate them, that you who are to succeed us may be fully alive to the mishaps which may occur, and which, unless you know that similar ones have occurred before, may, when they come to you, unduly weigh upon and harass you. In one case I tell you that I failed to extract the stone, and the child died, I believe in consequence of the operation.

After lithotrity, according to the number of times you may have crushed the stone at that sitting, there will be of course more or less detritus in the bladder. The passage of this may often be much facilitated by using this instrument invented by Mr. Clover. It is most ingenious, and at times very useful. It consists of a large catheter with a very full-sized eye, or completely open at the end, to which is attached at the upper part a glass chamber, and to this, again, an india-rubber flask. The catheter is introduced into the bladder, and the air having been expelled from the flask by filling it with water, it is attached to the catheter, and the water forced into the bladder by compressing the side of the flask. When allowed to expand again the water is sucked back into the flask, and any fragments that come with it subside to the bottom of the glass chamber. This process can be repeated as often as necessary.

The prognosis in both the cases operated upon to-day is very favourable. The old man will have to be in the hospital for some time, and probably will have to undergo ten or fifteen sittings before the stone is completely pulverised and evacuated. As to this I cannot say, for sometimes there is considerable difficulty in catching the stone, and at others it passes between the blades immediately. Still, if he be long here, the risk to him is considerably less than if we performed lithotomy. In this child, on the contrary, to lithotrise would be madness. Still, though cutting is so successful in early life, no matter how skilfully performed, the operation is an operation, and as such has a certain percentage of deaths, even when undertaken by the ablest hand. The most trifling wound in certain conditions of health may conduct to death; we can hardly, therefore, claim exemption for lithotomy, which is one of the capital operations of surgery. But when I tell you that I have had forty successive cases without a death, the risk, you must acknowledge, is not so very great. The forty-first may possibly be an unsuccessful one; but, at any rate, I see no reason why it should be so at present.

ON CERTAIN FATTY OR LIPOMATOUS TUMOURS AND THEIR TREATMENT BY ABSORPTION.

BY JOHN GAY, F.R.C.S., &c.

CASES sometimes present themselves to our notice in which a considerable number of fatty deposits, varying from ten or twenty to (it has been said) a hundred, have been met with in different parts of the body of the same person. These deposits choose, for the most part, the arms, thighs, and the buttocks, as the seats of their growth, and are by no means exclusively confined to persons otherwise more than ordinarily obese. They do not attain great size; for, as additional fatty matter is deposited, so it seems disposed rather to seek other and isolated spots in which to form itself into several small tumours than to concentrate itself in one large tumour. They are usually of firmer consistence than the ordinary solitary lipoma, and are flatter in shape, and lie more directly below, and sometimes in closer union with, the dermis. Their outline is usually, but not always, well defined; they are, as far as I am able to judge, devoid of cysts, and are more or less painful on pressure according to their proximity to cutaneous nerves. They appear to differ somewhat from the "fatty

outgrowth" of Brodie, as well as from the "lipoma diffusum" of Lebert. These cases have not attracted much notice, in all probability from their being of comparatively rare occurrence; and I cannot learn that in any one case have the tumours themselves been made the subject of post-mortem examination.

That they are composed of fat, and that the tissue does not differ from healthy fat, with the exception of its being of firmer consistence, I cannot doubt.

One such case recently occurred in the course of my practice. I had seen others, and dismissed them with the advice that they had better be borne with than subjected to any treatment except that suggested by Sir B. Brodie—viz., the internal administration of an alkali—the liquor potassæ. The results of that treatment I have not had an opportunity of learning in any one case.

The case alluded to was that of a gentleman, over middle age, and in physique rather approaching that of the knight of La Mancha than his squire. He had noticed them for several years, but not until they had attained almost the size which they had respectively when I saw them, whilst several had become annoying from their having selected inconvenient sites, and such as had subjected them to pressure or friction. The patient's only other complaints (and these were of long standing) were slight dyspepsia, perhaps a little gout, with unusual coldness of skin and extremities, even in the warmer months of the year.

The question of treatment engaged my thoughts, and it suddenly occurred to me that, inasmuch as dead animal textures, so long as they are of normal structure and have not undergone molecular change—such as the textures used for ligature, bones, cartilage, &c.—are removable by the absorbents, if brought into contact with them in the living body, why should these fatty tumours resist their agency under like circumstances?

The only answer that I could give to this question, having the slightest air of probability, was that the *firmness* of the fat in these tumours denoted a condition of their physical elements which was inimical to their absorption. It is known that the fat of these tumours is characterised by the crystallisation and separation of its elements, especially of the margarine; and it occurred to me that it might be just this change, constituting as it does an essential difference between this and ordinary living and normal fat, which is the immediate cause why the former is able to defy the action of the absorbent system. It followed consequently that it is only to liquefy the fat of such a growth or tumour by heat, and the absorbents will remove it. In accordance with this view I ordered hot baths—temperature from 120° to 130° if it could be borne—to be repeated as often as might be safe or convenient.* The result has been that many of these tumours have been entirely removed, whilst the nuclei of the firmer ones alone remain. I have said "the *result*" has been so and so. I will not venture at present to go so far without qualifying the assertion with the condition, that further experience shall concur in showing that the relation to each other of the facts narrated—viz., the treatment and the *quasi* cure—is more than a coincidence.

If it should turn out to be, on further evidence, a *result*, then it might open up the question as to the treatment of other, and what, forms of deposits through the instrumentality of the same agency.

Finsbury-place South.

CLINICAL REMARKS ON CHLOROFORM AND ITS ADMINISTRATION.

BY G. VIVIAN POORE, M.D.,

LECTURER ON MEDICAL JURISPRUDENCE AT CHARING-CROSS HOSPITAL.

(*Continued from page 523.*)

THE number of lives that chloroform has saved is certainly inestimable. The number of deaths that have been attributed to it is not more (taking the highest computation) than a few hundreds. Evil is more long-lived and makes a greater noise in the world than good; so while the fact of a life saved by chloroform makes no noise beyond the small circle of acquaintance of the owner of said life, a death from chloroform is considered food for hungry penny-a-liners, and monopolises a paragraph in every country newspaper.

On account of the notoriety which attaches to it, as well as on account of its intrinsic awfulness, death from chloroform has largely attracted the attention of scientific men. It behoves us, therefore, carefully to review this matter, and ask ourselves in how many ways chloroform may kill; or, perhaps, a more practical form of putting the question would be,—In how many ways may death take place during an operation under chloroform?

There is no doubt that chloroform is not answerable for all the deaths that have been attributed to it. Sudden deaths on the operating table were by no means unheard of before the days of chloroform. Sir James Simpson has collected and published ten such cases, in which the shock of an operation, reacting upon a heart already weakened by debility and fright, occasioned fatal syncope. The same thing may occur if the patient be only partly anæsthetised. Professor Lister mentions a case in which amputation of the penis was to be performed, and in which, the patient not being completely anæsthetised because the operation was short, cessation of the pulse and death were coincident with the single stroke of the knife necessary for the operation. This he maintains could not have occurred if the patient had been fully narcotised, for then it would have been impossible for the shock of the operation to have reacted on the heart. (Or, if the heart had not been weakened by chloroform, would the shock of the operation have proved fatal to it?) Death may also occur from loss of blood during the operation. There is no doubt that a good many of the fatal cases of chloroform have in reality been cases of syncope resulting from one or other of these causes, the chloroform itself playing only a small, or perhaps not any, part in the fatal result. There are however cases, and many such, in which death is due solely to the employment of chloroform, and to such cases I wish now particularly to direct your attention.

Death from chloroform may occur in two ways:—1. *Suddenly*; the pulse ceasing either before or together with the respiration. 2. *Gradually*; the respiration becoming embarrassed before any effect is produced on the pulse. Death in either of these ways is brought about by an overdose of chloroform. In the first case, by the quick administration of a highly concentrated chloroform atmosphere; and in the second case, by the long-continued administration of a moderate dose. Dr. Snow and others have proved that the main danger is in giving a too concentrated chloroform atmosphere. The committee of the Medico-Chirurgical Society proved beyond a doubt that chloroform very soon weakens the heart; and they invariably found that the pressure on the femoral artery of dogs and other animals, as measured by the hæmadynamometer, got gradually less and less as the animal succumbed to the influence of chloroform. The heart therefore (more especially if it be in a condition of fatty degeneration) is, one might say, in all cases of chloroformisation prone to stop at slight causes.

I will first endeavour to explain—although the matter is not capable of rigid proof—how a strong dose of chloroform causes sudden stoppage of the heart. It is not, I think, reasonable to suppose that in these cases the stoppage of the heart is due to the excess of chloroform which has found its way into the muscular substance of the heart. It is unreasonable, it seems to me, to assert that an atmosphere of chloroform of a certain strength, which we will designate by the number 6, inhaled only for a few moments, will cause more chloroformisation of the heart itself and of the sympathetic nerve than an atmosphere of 4 inhaled for an indefinite period. This theory is unreasonable, and to my mind carries no conviction. Dr. Anstie explains the different modes of death in this way. He says: "When the impregnation of the blood takes place with moderate rapidity, the sympathetic nervous system is the *ultimum moriens*, and death begins at the lungs; but when, on the contrary, the circulation becomes very rapidly impregnated with a large proportion of chloroform, the narcotic effect may fall with such force on the sympathetic nerves as to extinguish their vitality at once.

I would explain the mode of death from chloroform by its action on the pneumogastric nerve. It is a matter of every-

* The mode of application of the heat is of course open to variation.

day observation that the first effect of the inhalation of a moderately strong atmosphere is the irritation of certain of the branches of the pneumogastric, as evidenced by the spasmodic action of the pharynx and larynx, producing involuntary acts of swallowing, coughing, and a feeling of choking due to spasmodic closure of the glottis. Now the pneumogastric not only supplies the air-passages, but the heart as well; and it is known that any violent irritation of the cardiac branches paralyses the heart at once. I have long thought that the sudden death in these cases was due to the reflexion of the irritation of the respiratory set of terminal branches to the terminations of the cardiac set. It has long been known, and is a matter of daily observation, that an irritant in the stomach will cause syncope; why should not the presence of an irritant in the air-passages have a similar effect? There are two things which would seem to bear out this assertion. One is the sudden death which occurs, even without spasm, in cases of disease of the larynx. On this point Sir W. Jenner has said, in his Lectures, "We often find in these laryngeal cases that the patients die suddenly, as if they were shot." Some recent experiments of Dr. Leven's, reported in THE LANCET, also bear out this theory. He says that the trachea is not merely an inert passage for air—that it is intimately connected in its function with the medulla oblongata through the pneumogastric. He found that a strong ligature suddenly applied stopped at once both respiration and circulation, and sudden death followed. If the pneumogastric had been previously divided, the animal did not die suddenly on the application of the ligature, but slowly from carbonic-acid poisoning. I have no doubt in my own mind that death may occur from the reflexion of irritation from the air-passages to the heart, and hence arises the great danger of giving chloroform in too concentrated a form.

Next, as to that mode of death in which the respiration ceases before the pulse. This might occur by the gradual slowing and cessation of the respiratory act, but practically it rarely does so. The more common mode is by the falling together of the parts at the top of the larynx. This may occur in two ways: 1, by the falling back of the epiglottis, as in swallowing; and, 2, by the approximation of the folds of mucous membrane which surmount the arytenoid cartilages to the base of the epiglottis. This last is, according to Professor Lister, the kind of obstruction which gives rise to laryngeal stertor. For my own part, I should be inclined to think that the first mode of obstruction, by the falling back of the epiglottis, may at all events occur as well. I see no reason why it should not do so. The Committee of the Medico-Chirurgical Society observed that in dogs, when they became stertorous, the epiglottis flapped backwards and forwards. The laryngeal stertor of chloroform is usually a paralytic phenomenon, but obstruction of the larynx may also take place by spasmodic closure of the rima glottidis. This closure of the orifice of the larynx, unless it be absolutely complete, produces stertor, and unless the evil be quickly remedied a condition of apnœa is induced, and the heart, already weakened by impregnation with chloroform, ceases to act.

The first mode of death under chloroform is sudden, and almost without warning, occurring generally in the early stages of administration. The second mode is gradual, usually accompanied by laryngeal stertor, and occurs in the advanced stages, when the muscles of the larynx are paralysed. Should syncope occur from any other cause—e.g., loss of blood—while the patient is anæsthetised, or rather, I should say, while the heart's action is weakened by impregnation with chloroform, it would be more likely to prove fatal than if no chloroform had been administered; and I have no doubt that many deaths have occurred in this way, especially in those cases in which death has ensued after the administration has been stopped, and the patient is coming to himself.

Having reviewed the effects of chloroform, and its mode of killing, we have next to consider the best modes of administering it. As you will readily have seen, the great thing to guard against is giving an overdose. The Committee of the Medico-Chirurgical Society decided that 3½ per cent. should be the average, and 4½ per cent. the maximum, amount of chloroform; that is to say, that the atmosphere which the patient breathes should not contain more than 4½ parts of chloroform vapour and 95½ parts of air. A great many inhalers have been devised for regulating the proportion of chloroform inhaled by the patient. There is only one which, in my opinion, is of any use. This is Clover's apparatus. None of the others effect the purpose for which they were designed, and they lead to that greatest of all errors, which I may be allowed to call a mechanical as opposed to an intelligent administration of chloroform. Out of 109 fatal cases collected by the Medico-Chirurgical Committee, inhalers of one kind or another were used in 28, or more than 25 per cent., and the much-vaunted inhaler of Dr. Snow was used in 5 cases. On the other hand, in Edinburgh, where no inhaler is used, Mr. Syme stated that chloroform had been administered 5000 times without one fatal case. With Clover's apparatus you can be absolutely sure that you are not giving your patient a dangerously concentrated atmosphere of chloroform, but I must warn you that in the hands of a careless person it is quite capable of killing, and that when using it you must watch your patient as constantly and as carefully as if no inhaler were being used. Mr. Clover's apparatus most thoroughly effects the purpose for which it was intended, but there are to my mind five objections to it: 1, cost; 2, size and difficulty of transportation; 3, it leads, like all inhalers, to what I have called mechanical administration and want of attention to the state of the patient; 4, in cases of prolonged operation you are obliged to leave the patient for the purpose of refilling the bag (this is, I think, the most serious objection to it); 5, in some cases the mixture of chloroform and air is not strong enough to fully anæsthetise the patient (this rarely occurs, and at the most only leads to loss of time). On the whole, I would advise the use of Clover's apparatus when feasible, and mainly for this reason, that if a fatal accident were to occur when it was being used, a coroner's jury would be bound to hold the administrator free from the blame of having given too strong an atmosphere. If you have not got Clover's instrument, use a napkin or a piece of lint. Chloroform was administered at Edinburgh five thousand times on a towel without a fatal case; and Professor Lister has shown that the amount of chloroform given off from a folded towel on which a drachm and a half had been poured, held close above the face, was not more than enough to form an atmosphere containing 4½ per cent. of chloroform, even supposing that the whole of the chloroform given off was inhaled by the lungs. It is usually administered by means of a piece of lint covered with a towel; and this method has the advantage, which the Edinburgh method has not, of allowing the operator a view of the patient's countenance—a point of no small importance.

To administer chloroform, take a folded piece of lint of three or four thicknesses and of a size that can conveniently be held in the hollow of the fingers and palm, and on it pour about one drachm of chloroform. And here I may mention that, by holding the lint in the hand, evaporation from the upper surface of the lint is reduced to a minimum, and unnecessary waste of chloroform is prevented. This is another respect in which the piece of lint is superior to the folded towel. There is no use in accurately measuring the amount of chloroform poured on the lint, since the rate of evaporation is not materially different whether one drachm or more be used. Your patient being in a recumbent position, stand behind him, and before commencing the inhalation ascertain the condition of his pulse by placing the middle finger of the left hand on his left temporal artery, and while doing so endeavour to reassure him and allay any unnecessary fear on his part by a few cheerful words. See that all his clothes are loose. Then commence the inhalation, holding the piece of moistened lint three or four inches from the patient's face, and telling him to breathe quite naturally, always bearing in mind the danger of a strong atmosphere in the early stages, and carefully watching for coughing or acts of swallowing; when, if any such occur, the lint must be moved further away, and approached again more gradually. If the patient show no signs of the chloroform being too strong, the lint may be gradually approached to within an inch and a half of the patient's mouth and nostrils; and then, to still more concentrate the atmosphere, the hand which holds the lint may be covered by one fold of an ordinary towel, which may hang loose over the mouth and chin, but should be so arranged above that the patient's eyes and forehead may remain visible. I believe the advice which has been given,

"Begin boldly; there is no risk with the first inhalations, and the patient may be instructed to draw full breaths," to be as bad as advice can be. I would say, "Begin cautiously, and tell the patient to breathe quite naturally." Having got your patient fairly inhaling, continue the inhalation until there is no winking when the margins of the eyelids are touched, and the limbs are perfectly relaxed. You may then pronounce him ready for any operation. An inhalation generally takes about four minutes; often more, seldom less. You must bear in mind that, in the heat of summer, chloroform evaporates more rapidly than in the colder seasons of the year.

While giving chloroform you must devote your undivided attention to the patient. Bear in mind that you are dealing with a potent poison, and that a state of complete anæsthesia may quickly become a state of death if the administrator is the least unmindful of the responsibility of his duties. Keep one finger on the pulse, and watch, as well as listen, very narrowly to the state of the respiration. The respiration is of more importance than the pulse undoubtedly, but the pulse is by no means to be neglected. It often gives most important information as to the state of the patient, and it is so easily felt at the temporal artery by the left hand, which if not engaged in this way would be doing nothing, that it seems to me not wise to advise that the state of the pulse should be entirely neglected; besides the anæsthetist should always be ready with his answer when interrogated by the surgeon, as he often will be, as to the condition of the patient. When the patient becomes excited he must be watched very narrowly, and if the respirations become proportionately quickened so must the chloroform atmosphere be proportionately weakened by withdrawing the hand slightly from the face. When the muscles become rigid and the patient holds his breath and becomes livid, the chloroform should be given very weak indeed, because the patient is becoming semi-asphyxiated by the suspension of respiration, and this condition is often followed by extreme rapidity and depth of respiration, and a dangerous condition is apt to supervene since anæsthesia is added to asphyxia. Here I may, I think, fittingly mention one very important fact about chloroform-vapour—namely, its cumulative action. This should always be borne in mind, for the state of narcosis frequently intensifies for half a minute or more after the suspension of the administration. This is of course due to the entry into the blood of the chloroform-vapour which was in the lungs when the administration ceased.

(To be concluded.)

ON A CASE OF HYDROPHOBIA.

By THOMAS LIVINGSTONE, M.B., C.M.

THE following case of hydrophobia was observed in the month of August, 1869; and as the symptoms differ greatly from those of the case reported in THE LANCET of April 20th, its publication may be interesting.

John P——, aged forty-three, tall, strong, and wiry, had the ball of his right thumb bitten by a rabid dog. The wound was a severe one, several of the teeth having penetrated to a considerable depth. Solid nitrate of silver was freely used, and healing took place with little or no trouble.

On the 29th of August, some nine months after the reception of the virus, the patient experienced a peculiar sensation on the inner side of the right elbow, and he began to feel uneasy. On examination nothing unusual was to be seen, and the arm symptoms might very easily have been set down as slight neuralgic pains. The cicatrix of the wound was quite healthy in appearance, but was the seat of slight "tickling." The eyes had a glistening aspect, pupils contracted; tongue furred and moist; appetite gone; slight pain in the region of the stomach and across the loins; urine scanty and high-coloured; perspiration profuse; pulse 68; respiration quiet and normal; head free from pain; conversation rational. The patient at this time had difficulty in swallowing; the first mouthful of fluid he was persuaded to take was violently expelled by a spasmodic contraction of the diaphragm, and he literally gasped for breath. After making three such efforts he swallowed naturally; the difficulty appeared to be in beginning, not in continuing, the action.

On the following day, at 8.30 A.M., he was again seen. There was then no mistaking the cramps, which were gradually advancing so as to affect the muscles of the pharynx; no mistaking the convulsive spasm of the diaphragm, the difficulty in swallowing and the dread of the attempt, or the restlessness or anxiety depicted on the unfortunate man's countenance. The thirst was extreme, and the saliva very tenacious; pulse 62; respiration quiet and normal in the intervals between the paroxysms; and spasmodic convulsions of the whole body were taking place very regularly. These convulsions were set agoing by very trivial circumstances: an accidental current of air reaching him would make him bound from his chair, and he was thrown into a strong convulsion by the simple inquiry if he could drink, the word "drink" seeming to bring before his mind's eye a whole panorama of horrors. The patient could not drink; he took a glass in his hand to try, but was forced to put it down untouched, and was even unable to bring a spoonful of water to his mouth until he shut his eyes. Head free from pain, but beginning to feel giddy. He could swallow very little food; a small morsel which he had taken seemed sticking in his throat. He passed a sleepless and restless night, other symptoms remaining as before.

The patient was again seen at noon. His countenance wore the same weary and anxious expression; his mind remained perfectly clear, and he was still rational in conversation and willing to answer questions put to him, although frequently interrupted by a spasmodic affection of the muscles of the pharynx and diaphragm. When a spasm approached he gave two or three short sobs or sighs, then made frequent attempts to get a deep inspiration, which once obtained gave instant relief, the patient immediately swallowing, as if there were something to be got rid of. Each paroxysm took place very peculiarly. He would sit quite easy and tranquil until the invasion of a convulsion, then he would rush violently into the centre of the room, holding his head erect till the attack passed away. Tongue moist, but covered with a creamy fur in the centre, and on the left edge, about midway, it presented an appearance as if it had been bitten; the organ felt as if swollen and parched. Neither vesicle nor pustule could be detected beneath the tongue. Pulse 72. The entire surface of the body was acutely sensitive, so much so that the patient was in constant dread of the door being opened and a draught of cold air, or even the breath of anyone near, reaching him. Many attempts were made to take the temperature, but in vain, the very sight of the thermometer bringing on a convulsion; and although slipped unseen into the left axilla, the result was the same.

At 1 P.M. he was considerably worse, the paroxysms being more violent and more frequent, the muscles of the whole body being engaged in the convulsion. The poor man was very anxious to have something to relieve his thirst, yet showed the greatest horror of fluids. He was tried with a teaspoonful of milk: after considerable hesitation, in a hurried manner he threw it into his mouth, the half being swallowed, the remainder squirted out. Urine healthy in appearance, and passed without fear. At 3.30 P.M. he was so violent during the paroxysms that it was with difficulty he could be restrained. Pupils natural; thirst great; he hawked and spat a little viscid phlegm; voice slightly roughened. At 5 P.M. he complained for the first time of a feeling of oppression about the upper part of the chest, as if a weight were pressing upon it. A little before 7 P.M. he became delirious, and soon afterwards quite insensible. In a short time the lips became livid and the face turgid; breathing heavy, and every few minutes there was a spasm of the pharynx; skin clammy; pulse feeble and irregular; pupils neither contracted nor dilated, and quite sensible to light. At 8.30 P.M. he was dying; pupils fully dilated, and pulse gone. A strong convulsion of the entire body was excited by placing the hand over the cardiac region. Death took place at 8.50 P.M., not quite twenty-four hours from the beginning of the symptoms.

Treatment.—As regards treatment I have nothing to record, except acknowledging that the medicines used were quite powerless to arrest the advancing symptoms, or even to make the slightest impression upon them. The treatment simply aimed at keeping up the action of the skin by external means, and trying to allay the convulsions by

sedatives injected hypodermically. Muriate of morphia was used at the beginning, and atropine towards the close of the fearful scene; but, though exhibited in the usual doses, they did not give the slightest relief, and did not produce any of their physiological actions. The treatment in such cases is still experimental; and in watching the evolution of the symptoms, there was nothing so patent to my mind as the powerlessness of medicine in such a case. Hydrate of chloral has been extolled by some as a valuable drug in hydrophobia, and the history of a cure due to it is given in THE LANCET of April 20th; but it has still to be shown whether hydrophobia is influenced at all by it.

Remarks.—In making a few remarks, it is necessary to take notice of the length of time which elapsed before any symptoms showed themselves—nine months. This is a long time; and it may be fairly asked, Why is the poison a longer time in declaring itself in one person than another? Does this depend on the amount of virus introduced into the system; and, according to the amount, on its taking a shorter or longer time to increase sufficiently to have any effect upon the constitution? If so, why were no symptoms exhibited while the poison was increasing in strength and virulence, and why was the virus so quickly fatal at last? Or is it because the poison has united itself with the tissues of the wound, and has thus become incapable of absorption? Why were no local symptoms set up? And why should such a length of time elapse between the cause and the effect?—such a time being unnecessary for the absorption of coagula and consequently of the amalgamated virus. May not the length of time be due to the constitution of the patient, weak or strong; shorter in the former, longer in the latter? The stronger the patient is, the longer will it take for the poison to overcome the vital powers or to cause any impression. And perhaps this is the reason why some persons who have been bitten have never shown symptoms, the vital powers of the system being always stronger than the virus, until it was expelled naturally from the body; and perhaps the same reason explains why hydrophobia is unknown among children. If this is the explanation, it seems to me that the proper treatment, in our present knowledge of the virus, is prophylactic,—sustaining the powers of the body, and keeping the various secretions and excretions in proper working order. Then as to the local treatment, if the knife is not used, it might be shown that strong nitric acid ought to be employed as a caustic in preference to solid nitrate of silver; because the former penetrates into all the crevices of the wounds, while the latter does not. The early inability to swallow was well marked in this case, and therefore any medicine to be of use must be capable of being injected hypodermically. Anything that can be done must be done at once, promptly and energetically; because often the time is short to do our little in. When patient research has been rewarded by the discovery of the inherent principle of the poison, we will joyfully turn to the science of chemistry to select the weapon which is best fitted to counteract the ravages of this dreadful scourge.

Stanhope, Durham.

UNUSUAL INJURY TO THE ELBOW-JOINT.

By WILLIAM DATE, M.R.C.S. &c.

ON July 3rd, 1872, I was asked by my neighbour, Mr. G. F. Wills, to see with him a case at his surgery, and he has courteously allowed me to send for publication the following notes.

The patient was a boy aged fourteen, who had been thrown from a donkey about an hour before we saw him. He said he fell on his hand, but did not seem very clear on this point. The right arm was semiflexed, and could not be moved without great pain. The elbow-joint was much distorted and exceedingly painful. The head of the radius was very prominent outside and below the outer condyle, and rotated freely with the rest of the bone. Above it was a deep depression, in which the condyle could be obscurely felt. The olecranon could be felt below its usual position, resting with its extreme end against the trochlea. There was evidently no fracture of the ulna. Owing to the pain, the patient was "chloroformed" for the purpose of making a complete examination. The consequent muscular relaxation made reduction easy. The radius slipped in first, and the ulna immediately afterwards—both with a snap. After reduction it was found that the epiphysis of the inner condyle was detached. The arm was put on an angular splint and bandaged.

The accompanying drawing represents pretty accurately the relative position of the bones. At first sight it would

Ulna dislocated downwards and slightly forwards, with olecranon resting against trochlea of the humerus. Radius outwards. Inner condyle separated.

appear improbable that such a displacement could occur without more extensive fracture. But, thanks to the spare habit of the patient, the small amount of swelling, and, above all, to the exhibition of chloroform, we were enabled perfectly to verify the position of the bones.

The only notice I can find, in the text-books on which I can lay my hand, of any accident at all similar is in Fergusson's "Practical Surgery." In the third edition of that work, p. 241, is a drawing of a somewhat similar state of the parts met with in dissection. Here, however, the ulna is displaced outwards rather than downwards. On the same page the author remarks: "It is impossible to say what dislocations may not occur in this articulation. I have myself frequently seen the joint in such a distorted condition from injuries of old date (probably luxations and fractures combined) that the most experienced anatomists have been unable to appreciate the true condition of the ends of the bones." Not the least among the many advantages of chloroform is the opportunity which it affords of a thorough examination in cases of complicated injury to joints, and the increased facility of reduction of the displaced bones. Where there is any doubt in the diagnosis chloroform should always be administered.

Crewkerne.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

THREE CASES OF FRACTURE OF THE BASE OF THE SKULL, COMPLICATED WITH FACIAL PARALYSIS; RECOVERY; CLINICAL REMARKS.

(Under the care of Mr. MARSHALL.)

THE occurrence of three such closely similar cases as the following within a few days of each other serves to fix attention upon them; and the explanation offered below of the cause of the intercurrent and temporary local paralysis seems the only one which will account for the phenomena observed.

CASE 1.—Anthony N——, a scaffolder, aged thirty-six, was admitted Aug. 13th, having fallen on to a railway plate, on the back of his head, from a height of twelve feet. On admission he had a large scalp wound at the back of the head, and was bleeding from the nose and the left ear, but there was no subconjunctival hæmorrhage. The patient was very restless, and at times violent; and, although only

semi-conscious, answered when spoken to loudly. In bed he lay in a flexed position, with the knees drawn up and the arms folded across the chest; both pupils strongly contracted. The bleeding from the ears was great for two hours, and oozed slowly for four hours more. The wound and ear were enclosed in antiseptic dressings.

Aug. 14th.—Was very violent during the night, and tried to get out of bed. To be freely purged.

15th.—Lies coiled up on the left side; pupils contracted and equal; answers questions rationally, but is somewhat irritable.

19th.—Patient still irritable; complains of severe headache. Scalp wound nearly closed. No trace of the serous exudation, which lasted up to the 17th.

21st.—More sensible and less irritable.

22nd.—Quite conscious, and has but little pain in the head; the flexed position still maintained.

23rd.—Complains of pain passing through the head from ear to ear. Slight facial paralysis on the left side, affecting chiefly the parts supplied by the cervico-facial portion of the nerve.

25th.—Paralysis not increased; patient quite sensible.

29th.—Facial paralysis somewhat less.

Sept. 4th.—No symptoms except the slight facial paralysis and deafness of the left ear.

9th.—Not a trace of the paralysis left. Discharged.

Oct. 12th.—On right side hears a watch at four inches, and on the left at twelve inches. No perforation of the membrana tympani.

CASE 2.—Edward P——, aged twenty-five, a stoker, fell on the right side of his head and shoulder from a height of twelve feet. On admission at 1 P.M. on Aug. 14th, he was insensible for a short time. He had two scalp wounds above the right ear, and fracture of the right clavicle at the outer third. There was bleeding, which lasted an hour and a half, from the right ear. The wounds, including the ear, were dressed antiseptically.

Aug. 16th.—Patient quite sensible, and complains of pain across the forehead. Does not like the flexed position.

23rd.—Slight facial paralysis of the right side.

24th.—Paralysis increased; no pain in the head. There is a callus thrown out around the fracture in the clavicle.

26th.—Paralysis strongly marked. No albumen in the urine.

Sept. 1st.—Paralysis less, the lower part of the nerve being most affected. Right membrana tympani lacerated; deafness in this ear.

7th.—Paralysis entirely disappeared.

17th.—Discharged cured.

CASE 3.—Christopher C——, aged twenty-four, a lamplighter, on the 18th of August was on the top of one of the Underground Railway carriages, when the train moved on, and to avoid injury he lay down on the top of the carriage, and passed safely through two tunnels; but on coming to a third, which was lower, he was knocked off, and fell on his head between the train and the tunnel. On admission shortly after the accident, it was found that he had a small lacerated wound over the left eyelid, and was bleeding from both ears, but most from the left. Oozing from the ears continued for about four hours. Left pupil more dilated than the right; patient incoherent.

Aug. 19th.—Very restless, tosses about, and is unconscious; does not answer when spoken to. He lies on the left side in a flexed position. Both pupils contracted; the left markedly so. Wound and ears dressed antiseptically.

20th.—Is quieter, but is still irritable. To have an ice-bag to the head; and the bowels to be opened by a turpentine and castor-oil injection.

21st.—Patient is more conscious; remembers the accident; passes his water voluntarily.

22nd.—Facial paralysis on the left side well marked.

24th.—Paralysis has increased.

26th.—Yesterday the patient had two epileptiform fits, and another this morning. The convulsions were general, not affecting one side more than the other; absolute unconsciousness during, and drowsiness for some hours after, the fits; no biting of the tongue. Pulse and temperature normal.

27th.—No more fits; paralysis complete; some pain at the top of the head. No albumen in the urine.

30th.—Paralysis still more marked; no headache.

Sept. 4th.—Paralysis less; deafness and laceration of the membrana tympani on the left side.

15th.—Paralysis has diminished at the upper part, but is still complete at the lower part of the face. Discharged.

Oct. 12th.—Partial facial paralysis on left side. Hears a watch at six inches on the left side, but at eighteen inches on the right.

Remarks.—The symptoms in all these cases were those of fracture of the base of the skull passing through the tympanum, as evidenced by the prolonged bleeding and oozing of fluid from the corresponding external ear. In each case there was facial paralysis, coming on several days after the injury; in the first case on the tenth, in the second on the ninth, and in the third on the fourth day, and after all the signs of cerebral irritation had passed off. If the course of the cerebral symptoms be represented by one curve, and that of the facial paralysis by another, it will be found that the curve of the latter does not begin till that of the former has almost, if not entirely, subsided, and the two do not at all coincide. What, then, was the cause of the facial paralysis? It was evidently local; but not due to injury of the nerve, nor to hæmorrhage, or it would have been immediate; but its explanation seems to be found in considering the relationship which the portio dura, as it passes along the aqueduct of Fallopius, bears to what is known to be the most frequent seat of fracture of the petrous portion of the temporal bone. The line of fracture usually passes forwards and outwards from the internal auditory meatus, or a little to its outer side, across the tympanum; and through this portion of the bone the facial nerve passes close to the upper and posterior walls of that cavity. It is, therefore, exceedingly probable that, in these cases, the paralysis of the nerve, which coincided with no other morbid condition, was due to the pressure exerted on the nerve by the soft reparative callus thrown out along the line of fracture, extending into or across the bony canal through which the nerve runs. It must, however, be borne in mind that the callus in a flat immovable bone is not so great as that thrown out around a superficial and not perfectly immovable bone, yet it may be quite sufficient temporarily to compass the nerve. It is interesting to note that about the time that the paralysis showed itself in the second case a callus was noticed at the seat of fracture in the clavicle. Differences in the time of onset of the paralysis may depend on the differences in the seat and amount of the callus. The paralysis in the first case began to diminish in six, in the second in nine, and in the third in thirteen, days; and had entirely disappeared in the first and second cases in eleven and six more days respectively, while in the third case it still persists, but only to a very slight degree. This subsidence, and the differences in its period and rate, may be explained partly by the well-known power which nerves have of accommodating themselves to pressure, and partly by the more or less rapid absorption of much of the softer preliminary reparative matter which is first thrown out along the line of a fracture. In only one of these cases was the urine tested for sugar, and that with a negative result. It is, however, to be regretted that the other cases were not also examined, for Mr. Marshall has previously recorded a fatal case of fracture through the tympanum and internal auditory foramen, followed by inflammation extending to the floor of the fourth ventricle, in which sugar was found in the urine. Dr. Garrod has alluded to this case.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

A SHOT LODGED IN THE EYEBALL; UNUSUAL COURSE TAKEN BY THE SHOT, AND ITS REMOVAL BY OPERATION.

(Under the care of Mr. W. SPENCER WATSON.)

IN the early part of October, 1871, John W——, aged forty, a gentleman's gardener, was accidentally shot in the left eye. When seen soon after by Mr. Ireland, of Linton, Cambs, the anterior chamber was full of blood. This soon became absorbed, and it was observed that "the iris was quite insensible to light, and there was a laceration of the structures at the lower attached border of the iris. There was also at the lower and inner portion of the sclerotic an opening where the shot struck." Ordered a mercurial aperient, absolute exclusion from light, and a mixture con-

taining iodide of potassium. A fortnight after the accident he was sent up to the hospital. On admission there was general nebulosity of the cornea, great sclerotic congestion, the pupil fixed, half-dilated, and insensible to light, and the patient suffering constant and severe pain. At about four lines below the cornea, and to its inner side, there was a bluish indentation in the sclerotic, as if from a penetrating wound. Oblique focal illumination of the vitreous chamber disclosed a yellowish deposit behind the lower part of the iris, at which point the pupil was partially drawn downwards. The crystalline lens was perfectly transparent. Several spots in the vitreous gave a dull yellow glare when examined by the ophthalmoscope, but the red reflection from the fundus was entirely wanting. Sight was absolutely lost.

Under these circumstances, bichloride of methylene was given to facilitate exploration, and if possible the removal of the foreign body. A fine canaliculus probe passed easily through the sclerotic at the bluish spot above mentioned, and penetrated freely into the interior of the eye without meeting with any hard body.

Mr. Watson then decided to perform iridectomy downwards, in order to give a larger aperture for the examination of the interior of the eye. Having made a free incision at the corneo-sclerotic junction, the iris forceps were introduced, and at this moment a piece of iris prolapsed into the wound, and the shot fell out into the conjunctival furrow. A small piece of iris was excised, and a compress and bandage applied.

The pain ceased very shortly after the removal of the shot, and has never recurred. The congestion and inflammatory exudation have also disappeared. Photophobia remained for several weeks. The sight of the injured eye has of course not returned.

August 2nd, 1872.—"He has no cataract, but is stone-blind. The sound eye is not in the slightest degree affected."

Remarks.—The course taken by the shot in this instance is very difficult to explain. The patient states positively that at the time of the accident he was looking in the direction of the bird struck by a shot from the gun of the gentleman by whose side he was standing. However the shot may have entered the eyeball, it is difficult to account for its resting ultimately at a spot anterior to its point of entry in the sclerotic. It is possible that, after it had lodged in the subchoroidal or vitreous space, its own weight may have carried it downwards and forwards to the position in which it was found, or that the effused blood may have offered less resistance to its passage in this direction than the more unyielding structures behind. Whatever be the explanation, the fact remains that the shot entered at a point considerably posterior to its ultimate resting-place; and the possibility of such a direction being taken by a shot in the eye may have some practical value in the consideration of the treatment of similar cases. The loss of vision was not, under the circumstances, to be at all wondered at; and, as no sympathetic irritation of the uninjured eye has yet shown itself, it may be looked upon as tolerably safe. The numerous cases on record in which foreign bodies in the eye have given rise to sympathetic ophthalmia, even after the lapse of years, make it a matter of hearty congratulation that in this case no foreign body is present; and though an injured eye is always a source of possible danger, it is infinitely less so when the injury has left no material irritant within the affected organ.

ERITH, CRAYFORD, AND BELVEDERE COTTAGE HOSPITAL.

CASE OF RADICAL CURE OF INGUINAL HERNIA.

(Under the care of Mr. F. B. JESSETT.)

MR. JESSETT is indebted to the paper published in THE LANCET of March 4th, 1871, by Dr. A. Vans Best, for the method of performing the operation; the instructions contained in which were faithfully carried out.

C. V——, aged twenty-six, a moulder in the ironworks of Erith, was admitted on March 18th with a large oblique inguinal hernia, reaching down to within four inches of his knee. About four years ago he ruptured himself whilst lifting, but he did not wear a truss for some time, and when he did it was of no good, as the hernia came down beneath it. He, however, managed to keep to his work, but his health gradually failing, he was taken into the hospital.

On March 20th, the patient having been put fully under the influence of chloroform, the hernia was reduced. The skin of the abdomen being drawn well over to the opposite side of the body to that on which the hernia was situated, the index finger of the left hand, carrying with it the integument of the scrotum, was passed well within the internal ring, which was very wide. A needle similar to that used by Mr. J. Wood, threaded with strong catgut, and having its point shielded by a plug of beeswax, was then passed close to the finger, and its point pushed through the internal pillar and abdominal parietes. One end of the catgut was now seized and held whilst the needle was withdrawn, still threaded, through all the structures excepting the invaginated scrotal skin. The needle was then passed through the outer pillar of the internal ring, the skin at the same time being drawn well over to the crest of the ilium, and the needle was passed through the same opening as before. The needle was then unthreaded and withdrawn, and the catgut tied firmly, so as to bring the two pillars of the internal ring closely together; the ends were cut short and the knot slipped into the opening. A pad and compress were firmly applied over the part, and the patient put into bed.

March 21st.—Passed a restless night; complains of much pain and tenderness over the inguinal region. Ordered one ounce of castor oil, which produced free relief from the bowels.

22nd.—Complains of sharp, pricking pains over the ring. Ordered twenty drops of sedative solution of opium at bedtime.

24th.—Bandages had slipped; pad was removed, and cold-water dressing applied.

25th.—A good deal of tenderness and inflammation set up. Ordered to have linseed-meal poultices applied with twenty drops of tincture of opium sprinkled on the face of the poultice.

From this time there was a good deal of inflammation and discharge. The poultices were continued, and he was kept perfectly quiet in bed until April 4th, when, the tenderness having disappeared, the discharge much lessened, and a great deal of thickening being felt, he was allowed to sit up for a short time, and on April 23rd was discharged cured. He was, however, furnished with a horseshoe-shaped boxwood truss, which he has continued to wear since.

He has been in the ironworks ever since at work, and at the present time there is not the slightest sign of any return of the hernia; in fact the canal will not admit of the passage of even the little finger.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, OCTOBER 8TH, 1872.

T. B. CURLING, F.R.S., PRESIDENT, IN THE CHAIR.

ON NON-PURULENT CATARRH OF THE MIDDLE EAR.

BY WILLIAM BARTLETT DALBY, F.R.C.S., M.V. CANTAB., AURAL SURGEON TO ST. GEORGE'S HOSPITAL.

THE author commenced by stating that the object of the communication was to direct attention—firstly, to the several conditions under which the Eustachian tubes become so obstructed as to prevent the free passage of air from the pharynx into the tympana; secondly, the various effects which follow catarrh of the tympana; and thirdly, the treatment adopted for these affections of the ear. The notes of cases treated at St. George's Hospital and elsewhere, extending over a period of three years, formed the basis of the paper; and there was an appendix containing an abstract of twenty cases which were considered typical of the disease under notice. When the Eustachian tube only was involved, the appearances of the tympanic mem-

brane most frequently noticed were—an increased inward curvature, unusual prominence of the short process of the malleus, and a tilting inwards of the handle of this bone. The chief element in treatment was regular inflation of the tympanum, on Politzer's method, until the catarrhal condition had subsided, when the hearing was completely restored. In the next class of cases—viz., when the mucous membrane lining the tympanum was the seat of catarrh—the changes noticed on examination of the tympanic membrane were alterations in curvature, opacities, thinning of the membranes generally as well as in circumscribed spots, and calcareous degeneration. The author considered that these should be regarded merely as the effects of catarrh, and not, as in the classification adopted by Mr. Toynbee, as separate diseases. Such changes were not of themselves the cause of deafness; the origin of this will be found to be behind the membrane, in the form of accumulations of mucus, and it is to the softening and removal of these that the treatment must be directed. With this view the injection of alkaline solutions into the tympanum was practised, either by means of the Eustachian catheter, or forced into the cavity of the tympanum with the aid of a Politzer's bag, while the patient performed the act of swallowing—some of the fluid thus used having previously been injected from a glass syringe into the inferior nares of the side to be acted upon. In a large proportion of the cases very considerable improvement in hearing followed; but the author stated that in many there were no appreciable results, for as it was impossible to judge of the precise changes that had taken place behind the tympanic membrane from its appearances, it was difficult to predict what might be the effect of treatment. In some instances an incision was made into the membrane, and the mucus evacuated through the cut by passing a stream of air through the Eustachian tube. Very good results followed this proceeding, but it was only done where more simple means had failed, and there was ample evidence of the mucus being in a fluid state.

Mr. HINTON thought that with regard to children perforation of the membrana tympani was more frequent than was imagined. He had often used to look when there were no symptoms pointing to this condition, and yet found mischief. With scarcely any pain and no deafness there might be slight perforation, which would heal up. These spontaneous openings seldom discharge all the matter formed in the inner ear, and it was difficult to keep any opening long patent. After such a healing, therefore, deafness might continue from imprisoned mucus. In cases of accumulation there was also a danger of loss of hearing from interference with the nerve as well as by its mere pressure. Incisions might be made again and again, if necessary, to relieve accumulations. He thought Mr. Dalby's rules as to incision not quite certain. In recent cases we might usually abstain from incision, as the tympanum possesses considerable powers of absorption. Chronic cases were better for operation.

Mr. HARVEY asked if they had seen the patients six and twelve months after operation. He had, and the results were not encouraging. It was hard to understand how so much could be removed from such a small cavity as the tympanum. Nothing was said as to constitutional management, though patients often got well with that. Patients were often very ill after the operation, and in some of the cases described he thought the operation was hardly justifiable. Often the disease was syphilitic or rheumatic.

Mr. T. SMITH was glad to hear from Mr. Hinton such opinions as regarded catarrh and perforation in children. These perforations are not attended with any great loss of tissue, and are soon got over. He could testify to the good results of the operation, especially when other means had failed.

Mr. HULKE asked how the membrana tympani could be dragged inwards when the cavity was full of fluid.

Mr. C. HAWKINS asked in what cases Sir Astley Cooper performed perforation of the membrana tympani. He had the instrument Sir Astley used to employ.

Mr. DALBY had tried to distinguish acute purulent from subacute mucous catarrh. Toynbee described maladies as primary which were the result of this. His records of cases extended, some over three years, all over six months. The curvature of the membrana tympani was always increased where the Eustachian tube was closed.

A CASE OF OVARIAN DROPSY OPERATED ON DURING AN ATTACK OF ACUTE PERITONITIS.

BY RICHARD T. TRACY, M.D.,
LECTURER ON OBSTETRICS IN THE UNIVERSITY OF MELBOURNE.

(*Communicated by* T. SPENCER WELLS, F.R.C.S.)

In this paper the author gave an account of a patient aged thirty-one, married five years, the mother of two children, who had noticed the tumour fifteen months. When first seen she was in a hectic condition, with a rapid and feeble pulse, and suffering great pain from the enormous distension of the abdomen. Some relief was at once obtained by tapping and drawing off two quarts of thick colloid fluid (the tumour was multilocular). After the tapping she was removed to the hospital, and carefully examined. She measured thirty-eight inches in circumference, nine inches from the ensiform cartilage to the umbilicus, and eight and a half inches from the umbilicus to the pubes. Her stomach was very irritable, and she had to be supported by nutrient enemata. Her temperature was 102°; pulse 120; the abdominal tenderness extreme. As it was evident she would soon sink unless something could be done to relieve her, ovariotomy was performed on March 19th. The tumour was multilocular, semi-solid, and almost universally adherent; the peritoneal surface was deeply congested, much thickened, and full of flaky lymph, which was removed in large quantities. The pedicle was secured with a clamp, and the wound closed by deep silk sutures and superficial ones of horsehair. Two hours after the operation there had been a considerable fall in the temperature. On the fourth day there was a large escape of gas and fetid fluid from the wound, and from this time recovery was rapid and finally complete. The author expresses his opinion in favour of bichloride of methylene as an anæsthetic, and recommends the extra-peritoneal treatment of the pedicle by the clamp wherever it is practicable.

Dr. HEYWOOD SMITH asked if there was any record of the quantity of blood lost. That sometimes did good.

Mr. SPENCER WELLS said the letter contained nothing about it; but it was hardly a case where loss of blood was likely to do good. He thought it was remarkable how often patients did well after rupture of the cyst into the abdomen.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, OCT. 15TH, 1872.

MR. JOHN HILTON, F.R.S., PRESIDENT, IN THE CHAIR.

DR. PEACOCK exhibited a Diseased Heart which had been sent him by Mr. Haycock, of Hackney. It was enlarged, covered with pericarditic effusion, and had a hydatid cyst the size of an orange on the posterior part of the right and left ventricles; it projected into both ventricles, and had caused death by bursting into the right. The man, aged thirty-four, had led a regular life, and had been for some time in Australia and India. For the last ten years he had lived in England. He had been under treatment for dyspepsia. One morning he was seized with a rigor and sickness, supposed to be an attack of ague; he died suddenly in the evening, about fourteen hours after his seizure. A number of similar cases have been brought before the Society. The recent pericarditic effusion in this case was curious.

Dr. PEACOCK then showed some Moulded Casts expectorated by a patient who had hæmoptysis for twelve days, and which ceased after they were brought up. These are very rarely met with in such cases. On section they were homogeneous, decolorised coagula, and differed from those in plastic bronchitis, which are white and glistening.

Dr. MURCHISON asked if the liver had been examined in the case of the hydatid in the heart. Dr. Budd was wont to say of hydatid cyst found in the heart, that the liver was always affected, the echinococcus being carried from the liver to the heart.

Dr. PEACOCK said that all the organs had been examined, and only the heart was found affected; there had already been several cases of solitary hydatids in the heart reported in the Transactions.

Dr. DUFFIN related a case of sudden death occurring in King's College Hospital caused by the rupture of a hydatid

cyst into the right ventricle, and blocking up of the pulmonary artery; no cysts were found in any other organ.

Dr. CRISP said that Dr. Cobbold mentions several cases where hydatid cysts were found in the heart alone.

Mr. LAWSON exhibited an Enlarged Gland from the groin and the Liver of a patient who had died in Middlesex Hospital. She was admitted complaining of vomiting and retching, persisting for fourteen days. On examination a small tumour was found in the groin, which she said had been there for three months; there was no tympanites, but pain in the region of the liver; no constipation. She was supposed to be suffering from strangulated omental hernia. As her symptoms were unrelieved after twenty-four hours, the tumour was cut down upon and found to be an enlarged gland; it was removed, but the vomiting continued, and the patient died the next day. At the autopsy, the abdomen was full of blood; a large clot under serous coat of liver; and projecting from the under surface a tumour connected with a tumour in the liver. On section a number of other deposits were found. Both ovaries were diseased, and there were deposits in the lungs. These deposits were made up of spindle-shaped cells. It was then ascertained that a tumour had been removed from the back some months ago, and these were the secondary deposits.

Dr. HILTON FAGGE showed drawings of the organs of a patient who had died with general Xanthelasma. He referred to two patients whose cases he had brought before the Society in 1868. He was called to see one of these (the one in whom the xanthelasma was most marked in 1870); she was suffering from severe hæmatemesis. She died, and a post-mortem examination was made. Two days before death the change in the skin declined, the tumours on elbows wasted, and the soft patches round eyelids lessened; still the change was noticeable. On examining the larynx, a patch was seen on each side of the vocal cords; these extended down the larynx to its bifurcation; below this no change. The heart was flabby and fatty; inside the left auricle, patches like xanthelasma or atheroma, and these extended through the aorta and its branches. Liver enlarged (sixty-six ounces), smooth on surface, on section resembling cirrhosis; ducts patent; spleen large and soft (thirty-five ounces); a number of fine white dots on capsule. There was extensive ulceration of lower part of large intestines, and thickening of the muscular tissue. Mr. Howse, who examined the parts, said that the change was everywhere the same; both on the skin and the tendons on the back of the hands—a universal atheromatous change; fine granular cells variously scattered among the tissue. In some parts this had gone on to a calcareous change. There is now sufficient evidence to show that xanthelasma is only the result of long-standing jaundice, brought about by obstruction or by some change in the liver. Mr. Hutchinson's cases show that xanthelasma palpebrarum occurs without jaundice, yet in most of his cases the patient had suffered from bilious headaches before the xanthelasma appeared. The liver in these cases was slightly affected; if more severely, the xanthelasma became general.

Dr. PYE-SMITH then brought forward the following cases of xanthelasma:—A widow, aged forty-nine, a cook, was admitted into Guy's Hospital last April. She had ague some years ago. Twelve months ago she was seized with a sharp pain in the right side of the abdomen. The skin was dry and dark-coloured; urine porter-coloured; stools white. After a time the skin regained its colour. Two months after she was again jaundiced, but had no pain. Two days before admission the severe pain returned, and the jaundice. There were then yellow deposits of vitiligoidea plana on the eyelids, and the same change on the flexure of the palms; no change elsewhere. The liver was enlarged and tender. She was supposed to be suffering from jaundice from gall-stones. The patches slowly increased on the eyelids and the hands. The urine contained bile-pigments; no albumen or biliary acids; no tyrosine or leucine. After a time she left the hospital. She returned in September with erysipelas, from which she died. The liver weighed forty-eight ounces; surface rough, on section slightly cirrhotic; gall-bladder small, contracted, containing a small gall-stone; cystic duct obliterated; the common duct much distended. Patches of xanthelasma found on capsule of the spleen.—The next case was one of general xanthelasma, under the care of Dr. Moxon. At the autopsy, the hepatic duct was found strictured by a small tumour. In these cases the xanthelasma was the result of chronic jaundice from obstruction of the duct.

Dr. WILKS showed for Mr. Marshall, of Preston, the Supra-renal Capsules from a patient who died of Addison's disease. A woman, aged twenty-eight, had been ill for three years with indefinite symptoms, great malaise, sickness, loss of appetite, vomiting, and discoloration of skin. She died semi-comatose. Heart healthy, and cretaceous deposit at the apex of each lung. The supra-renal capsules presented the usual change and were full of cheesy matter. We may consider this disease as the result of a chronic inflammation of the capsules.

Dr. CRISP showed specimens and drawings of an Entozoon found in the trachea of gallinaceous and other birds. It produces in chickens the disease called the "gapes," a number of these blocking up the lower part of the trachea and so suffocating it; the mortality is great from this cause. Dr. Crisp thought the subject was of importance and required investigation, as he believed the disease was preventable.

Mr. SPENCER WATSON exhibited a specimen and a microscopic drawing of an Epithelioma of the Eyelid, in which cysts had become developed. The microscopic section showed tubular prolongations of epithelium occupying areolar spaces, and a few empty spaces which represented the germs of the larger cysts.

Dr. KELLY exhibited a Heart with a number of fibro-cartilaginous tumours from a woman aged forty. She had enjoyed good health till a short time ago, when, after a shock, cardiac symptoms and dropsy came on. The sounds of the heart were muffled; no bruit. The pericardium contained thirty ounces of dark-red fluid; over the heart, chiefly about the base, and on the pericardium were a number of tumours; none were found in the walls of the heart or elsewhere. Under the microscope the tumours showed hyaline cartilage surrounded by a fibrous stroma; in some parts calcareous degeneration had taken place. Dr. Kelly said that this was a very rare specimen, and he did not know of another.

Dr. WILKS said there was a fibro-osseous tumour of the heart in Guy's museum; but it was a secondary deposit from a growth elsewhere.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCT. 2ND, 1872.

DR. BRAXTON HICKS, F.R.S., PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Honorary Fellows of the Society:—Fordyce Barker, M.D., Professor of Clinical Midwifery and Diseases of Women at the Bellevue Medical College, &c.; Otto Spiegelberg, M.D., Professor of Clinical Midwifery, Breslau; and T. Gaillard Thomas, M.D., Professor of Obstetrics in the College of Physicians and Surgeons, New York.

The following gentlemen were elected Fellows of the Society:—J. H. Gornall, Esq., Warrington; J. B. Spence, M.D., Lichfield; Professor Trenholme, M.D., Montreal; and T. Webster, Esq., Bristol.

Dr. SNOW BECK read a paper

ON A CASE OF PELVIC HÆMATOMA, OR RETRO-UTERINE HÆMATOCELE; WITH REMARKS, ESPECIALLY AS TO THE SOURCE OF THE HÆMORRHAGE.

A woman, aged forty, who had suffered from considerable dyspeptic symptoms, with severe hæmorrhoids, who had never been pregnant, and in whom the catamenia had always been profuse, suffered during the periods for the last two or three years from severe pain in the left iliac region. During the last period this pain had been very severe; it suddenly ceased, and a few minutes afterwards an oval lump resembling a duck's egg was perceived, firmly pressed against the abdominal wall in the left hypogastrium. This was the uterus. A soft elastic swelling existed between the uterus and the rectum, bulging forwards the posterior wall of the vagina, and presenting a soft depression directly behind the orifice of the uterus. No constitutional symptoms followed, nor anything to indicate inflammatory action. On the seventh day some dark-coloured clots and port-wine

coloured blood passed with a gush from the rectum; the swelling gradually subsided, and the patient gradually became well. It was concluded that an effusion of blood had suddenly taken place amongst the loculi of the pelvic fasciæ, probably from the rupture of a congested pelvic vein. The sources from which the blood came in pelvic hæmatoma were considered to be (*a*) rupture of an ovary which had previously undergone some process of degeneration, (*b*) rupture of a Fallopian tube, or the escape of blood from the congested vessels of this part, in which cases the blood would be effused into the cavity of the peritoneum; and (*c*) rupture of some varicose veins. When the vein was situated in the broad ligament the blood might be effused into the pelvic cavity or into the subserous cellular tissue. When the vein was situated in the pelvis the blood was effused in some of the loculi formed by the pelvic fascia. The reputed source of the blood by regurgitation from the uterus through a Fallopian tube, consequent upon some disorder of the menstrual function, was considered highly improbable; and the cases upon which this opinion was founded were closely examined. There was no evidence of this in any of the cases collected by Bernutz and Goupil, except where there was permanent obstruction to the outward flow of the catamenia, and consequent distension of the uterus. And the evidence was equally unsatisfactory in the twenty-seven cases recorded by Dr. Barnes. Some of these cases, with the remarks upon them, were closely examined. In the treatment it was considered unnecessary to interfere where there were no constitutional symptoms, and the effused blood was evacuated by the rectum or the vagina in a short time. But when this fortunate course did not occur, as a general rule it was desirable to procure the artificial evacuation of the effused blood,—when some weeks had elapsed without any signs of decrease in the swelling, when the swelling became more tense, more tender, and more painful, and when the temperature increased, the complexion became of a dirty-yellowish hue, the abdomen swollen and tense, when there were repeated shiverings, vomiting, rapid pulse, &c. The evacuation might be effected by a curved trocar passed in towards the centre of the swelling, or by free incision into the tumour. As a rule, the rectum was to be preferred to the vagina as the place for the artificial evacuation.

Mr. SCOTT said that the various opinions which had been expressed as to the true nature of cases published as cases of hæmatocele indicated in some degree the difficulty of arriving at a correct diagnosis. He had seen cases in which, after a few hours of acute cellulitis, collections of fluid had taken place which would have been difficult to distinguish from hæmatocele, and which yielded, on tapping, clear serous fluid only. Mr. Scott took exception to the statement that no regurgitation occurred from the uterus through the tubes unless there be complete occlusion of the os and cervix, as he thought it could not be doubted that in acute flexions, especially anteriorly, where dysmenorrhœa was very marked, regurgitation was possible.

Dr. RASCH thought an important aid to diagnosis might be found in the temperature. In one case, which came early under his notice, the temperature was for some time between 96° and 97° Fahr., and never rose beyond normal. If, in addition to this, we found fainting, sudden anæmia, and rapid appearance of a doughy tumour near the womb, the diagnosis was clear enough. The uterus, also, though displaced by a hæmatocele, was not so immovable as in cellulitis. He had never resorted to puncture, and thought it would be interesting to know how far an incision had to do with the production of the offensive discharges which had been noticed in some cases.

Dr. HEYWOOD SMITH thought sufficient stress had not been laid on the information elicited by the double touch or recto-vaginal examination. Mobility in itself should not be insisted upon, as that might vary in degree, according to the interval of time that had elapsed. With regard to the soft portion referred to, on the anterior aspect of the post-uterine swelling, in the case, he asked if it might not be due to the interspace between the two portions of the sacro-uterine ligament.

Dr. PLAYFAIR thought the difficulty in diagnosis was between hæmatocele and pelvi-peritonitis. The uterus, however, was apt to be much more displaced and pushed out of its central position in hæmatocele than in pelvi-peritonitis. The uterus might be movable at a very early stage in hæmatocele, but later on the blood coagulated and the uterus generally became quite fixed. The introduction of the finger into the sac after puncture, to break down the contents, he considered to be attended with a certain amount of risk.

Dr. SNOW BECK then replied.

Mr. LOWNDES (of Liverpool) read a paper

ON THE REGISTRATION OF STILL-BIRTHS;

to which were appended tables showing the ratio of still-births in continental states to those in British practice. The want of registration of still-born children in this country had generally been regretted on medico-legal grounds. But the author thought it was to be regretted also from an obstetrical point of view; and he took occasion to refer to the more frequent application of the forceps as a means of diminishing the number of still-born children. In those countries where a systematic registration was enforced, it included a very large number of still-born illegitimate children, the ratio of legitimate still-births to illegitimate ones being as three to five. A comparison was then instituted between the foreign still-births and those in this country, the tables from which the latter were calculated being the reports of the Guy's Hospital Charity and the eastern districts of the Royal Maternity Charity, and in private practice the statistics published by Uvedale West, Anderson Smith, Hadaway Lambden, Harper, &c. The continental tables gave an average of five still-births per cent., while in British practice they ranged from three to ten per cent. Inquiries made at local cemeteries revealed that the still-births amounted to at least six per cent. of the whole number of births. The author urged the formation of a committee of the Society to collect more information on the subject, to consider the best mode of registration, and to urge upon the President of the Local Government Board the importance of compulsory registration of still-births. In a medico-legal aspect this registration would tend to check artificially induced abortion and fœticide; from an obstetrical point of view it would be desirable in helping us to judge how many still-births are preventable, how many result from syphilis, and how many are due to premature, protracted, complex, and instrumental labour.

Dr. PLAYFAIR referred to the remarkable statistics of Dr. Hamilton, in whose practice, by the frequent use of the forceps, there had been 731 consecutive labours without a single still-birth.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, OCTOBER 17TH, 1872.

DR. HANDFIELD JONES, F.R.S., PRESIDENT, IN THE CHAIR.

Mr. FAIRLIE CLARKE narrated a case of Imperforate Anus in a male infant operated on by him thirty-six hours after birth, who died two days after operation, from exhaustion. No peritonitis was found at the post-mortem; the gut terminated an inch from the anus. Mr. Clarke inquired the relative frequency with which male and female children were thus affected?

Mr. H. POWER had operated on three cases at the Westminster Hospital; all were male infants; all died; one lived three weeks, another a year.

The PRESIDENT narrated two cases of Rheumatic Fever with unusual complications: in the one case followed by purpura, swellings of the thighs, back, penis, and scrotum, erisipelas of the head, melæna; in the second, by severe vomiting and purging.

Dr. W. H. DAY read a paper

ON HEADACHE IN CHILDREN.

After remarking on the symptomatic value of "Headache" as a term, the author reviewed the commonest varieties of headache in children, and then dwelt especially on a peculiar functional form, of which he had met with several examples. These were associated, he believed, with some intricate, though undemonstrable, change, physical, structural, or chemical, going on within the cranium; giving rise to some confusion or abnormal sensation in the head or to actual headache. This peculiar cerebral change is accompanied occasionally, but not of necessity, with enlargement of the head, wasting of the extremities, flabbiness of the muscles, and looseness of the joints; there are also pallor

and debility, restlessness by night, irritability by day; a slow and sometimes irregular pulse, with dull and persistent headache; the temperature is normal. Dr. Day treated the early stage of the disease with bromide and iodide of potassium, and advocated, later on, the use of iron, bark, and cod oil. Tonics did harm in the early treatment.

Dr. FARQUHARSON gave some interesting experience in relation to headache in children based upon cases treated by him at Rugby. He referred to the importance of not overlooking headache as a symptom of slight sunstroke, and in connexion with overwork; in the latter cases the urine contained alkaline phosphates.

Dr. BROADBENT regarded persistent headache in a child as a suspicious symptom. Dr. Day's cases he considered examples of the headache, of rickets, or hydrocephalus. He advocated the use of small doses of mercury, continued for a long time.

Reviews and Notices of Books.

The Science and Art of Surgery: being a Treatise on Surgical Injuries, Diseases, and Operations. By JOHN ERIC ERICHSEN, Senior Surgeon to University College Hospital, and Holme Professor of Clinical Surgery in University College, London. Sixth Edition, enlarged and carefully revised; and illustrated by upwards of seven hundred Engravings on wood. London: Longmans, Green, and Co. 1872.

A WELL-KNOWN and standard work on Surgery, such as that of Mr. Erichsen, requires but little notice at our hands when it has reached its sixth edition; it would be unfair, however, to the author not to notice his unceasing efforts to keep the work strictly *au courant* with the knowledge of the day. The present edition is specially noteworthy for the improvements in and additions to the illustrations, which have always formed a prominent feature of the work. A large number of the earlier woodcuts, illustrating the operations of surgery, have been redrawn, with manifest advantage; while numerous additional drawings are interspersed throughout the work, raising the entire number of illustrations to 712.

We turned with some curiosity to the pages devoted to the "antiseptic treatment" of abscesses and wounds, and found at pages 114 and 148 very detailed accounts of Mr. Lister's methods of proceeding. Mr. Erichsen appears to regard the method as of great value in the treatment of abscess, especially the chronic and cold abscess; but he seems to be somewhat chary of expressing an opinion as to its applicability to recent wounds. The subject of dislocations of the femur (we could wish, by the way, that the author would similarly speak of dislocations of the *humerus* rather than of the *shoulder-joint*) has been much extended by copious extracts and illustrations from Bigelow's work on the "Hip," the views of which seem to have general acceptance among British surgeons. The chapter on spinal concussion has, as might have been anticipated from Mr. Erichsen's well-known study of railway injuries, been considerably extended; while the question of impairment of vision from spinal injury has been enriched by reference to Wharton Jones and others. The valuable chapters on aneurism have been brought up to the present day, and are illustrated by numerous new woodcuts; and we notice that in cases of intra-thoracic aneurism the author dissuades from the operative interference which has been occasionally practised of late years. In the treatment of anchylosis after hip-joint disease, both Sayre's and Adams's operations are described and illustrated, but the author does not give any personal experience on the subject. The chapter on ophthalmic operations has been again contributed by Mr. Streatfeild, who has made many additions to it. Not only has new matter been added, but much has been rewritten. Many things also are noticed which are peculiar to Mr. Streatfeild's practice, or which, at least, originated with him, such as "grooving" the tarsal cartilage in entropion, and the operation of corelysis, and making Von Graefe's operation include all small sections of the cornea. The chapter on diseases of the jaws has also been considerably added to, and freshly illustrated. In the chapter on congenital malformations of the bladder, Wood's operation is described at length, and illustrated from the Medico-Chirurgical Transactions. An ingenious circumcision-tourniquet of Mr. Clover's is figured at page 756, and the chapter on ovariotomy has been extended and illustrated with drawings of various clamps.

These are only a few of the points in which the present edition of Mr. Erichsen's work surpasses its predecessors. Throughout there is evidence of a laborious care and solicitude in seizing the passing knowledge of the day, which reflects the greatest credit on the author, and much enhances the value of his work. We can only admire the industry which has enabled Mr. Erichsen thus to succeed, amid the distractions of active practice, in producing emphatically *the* book of reference and study for British practitioners of surgery.

The Epistles and Art of Poetry of Horace translated into English Metre. By ANDREW WOOD, M.D., F.R.S.E., &c.; Member of the General Council of Medical Education and Registration of the United Kingdom. Edinburgh: William P. Nimmo. 1872.

"THE whirligig of Time brings in his revenges," says Shakspeare; and in the labour expended on the classics by the youth of England we see something like a retribution for the iconoclasm practised in Rome by their Norman ancestor, Robert Guiscard. Even in middle and advanced age the penalty continues to be exacted; and so we find members of all professions, publicists, statesmen, and lounging *dilettanti*, expiating by laborious study, interpretation, and reproduction of the extant *chefs d'œuvre*, the insults lavished by the Norse invader on the non-survivors. The Romans, says Charles Dickens in a well-known scene in "Dombey and Son," are "the implacable enemies of the British school-boy"; they are equally the despots of his adult years; but by that time their yoke has become easy and their burden light, and the thraldom is borne, not only with equanimity, but with actual enjoyment.

Out of the ranks of professed philologists few men are heartier or more intelligent in their homage to antiquity than Dr. Andrew Wood. So imbued is he with its spirit that he can scarcely address a meeting or a newspaper without scattering over his observations a perfect basketful of Greek and Latin flowers. If he button-holes you, it is with a rose of Pæstum; if he entertains you, it is with the choicest of Falernian. His classic wares are so constantly "in the window," so to speak, that we should be apt to suspect the furnishing of the shelves were it not that he has given such substantial proofs of the richness and genuineness of his stock. His translation of the Satires of Horace, which we reviewed some two years ago, was, with all its imperfections, the work of a sound scholar and a practised manipulator of verse. Its success was sufficiently encouraging to induce him to attempt the Epistles, and so we have in the neatly-produced duodecimo before us the fruits of a two years' devotion to their metrical interpretation.

The Epistolary vein of Horace is subtler and more delicate than his Satirical, partly because he makes the former the channel of more refined subjects, partly because it was a development of those "years which bring the philosophic mind." The translator's task is thus a more arduous one—so arduous, indeed, that it comes to be a question whether

literal interpretation should not be abandoned for paraphrase. The success of Pope and Swift in the latter school is far higher than any hitherto attained in the former; but where their genius, so cognate in many respects to that of Horace, is lacking, it is perhaps best to keep as close to the text as possible. Dr. Andrew Wood, modestly distrusting his powers of rivalling the wits of Queen Anne's reign in ingenious amplification and finish of phrase, interprets literally. Not possessing the mariner's compass of poetic vision, he "hugs the shore" of his author, avoiding the Scylla of diffuseness on the one hand, and the Charybdis of irrelevance on the other. The result is a faithful though somewhat bald presentation of the original; never weak, though occasionally uncouth in expression; generally fresh, and at times felicitous in its quaintness. His predecessors, Howes and Conington, have turned out a far more faultless bit of work; but their reproachlessness is conventional, and is generally gained at the expense of vigour and effect.

Dr. Wood, as might be expected, is happiest in his renderings of those Epistles (and they are not few) which are, either directly or indirectly, medical in their theme. The fifteenth of the first book is a good instance in point, its easy, man-of-the-world view of regimen, dietetics, and change of scene for the invalid whose complaint is more mental than physical being very well reproduced. The "Ars Poëtica," of which Goethe said that it would one day have as many theories of its purport as it had lines, is also a skilful bit of work. Indeed the entire series of translations are creditably done, the metre being well chosen; the interpretation, as a rule, correct; and the English free in its movement, while faithful to the text—freer, in fact, while not less faithful, than the English of its predecessor. The rhymes are occasionally faulty: as, for instance, "elements" and "audience" (p. 77); "properly" and "Sicily" (p. 45), which is no rhyme at all; and "Baiae" and "say" (page 53), which suggests misgivings as to the structure of the doctor's ear. Misspellings like "Lybian" (p. 40), and errors of grammar (p. xxiii., line 4), are also to be found. But these are blemishes which will not survive the second edition, to which, we trust, the little volume is hastening. We can forgive a good deal to the author of such faithful and flowing translation as the following:—

"Fuit haud ignobilis Argis," &c.
(Lib. II., Ep. ii.)

"There lived at Argos one of good estate
Who in a theatre believed he sate;
There joyfully (he the sole audience was)
He greeted wondrous actors with applause.
Life's various duties he performed right well:
Kind husband—neighbour good—host amiable—
Mild master, who his servants oft forgave;
Nor at a bottle's open seal would rave;
Nor knocked his head against a rock; nor fell
For want of care into an open well.
When by the kindly care of friends—still more
By active doses of pure hellebore,—
His malady and bile expelled, he came
Back to his senses, thus did he exclaim:
'By heavens, my friends, you killed me—not revived;
Since me of pleasure you have thus deprived,
And from me taken, ev'n by violence,
An error the most pleasing to the sense!'"

OUR LIBRARY TABLE.

Revista Médico-Quirúrgica: Publicacion quincenal de la Asociacion Médica Bonaerense. Buenos Aires, 1872.—From the August and September numbers of this well-conducted periodical we learn that the sanitary condition of Buenos Ayres for the two months was satisfactory; acute diseases being few, and those in general not alarming. Pneumonia, bronchitis, gastro-intestinal affections, rheumatoid arthritis, and catarrhal ophthalmia were the principal maladies. Small-pox had entirely disappeared. August, according to the practitioners of Buenos Ayres, is favourable to hæmorrhages, which may perhaps explain the frequent occurrence of sudden death in that month. Be this as it may, there is more epistaxis, hæmoptysis, buccal hæmorrhage, abortion, and so forth at Buenos Ayres in August than in any other time of the year. The periodical before us contains much to interest the European practitioner. The rules for compulsory vaccination seem to be well devised at Buenos Ayres; so also are those for the regulation of prostitution. According to the editor, Buenos Ayres may now be added to Belgium, France, Holland, Prussia, and other European States as an example of the great diminution of syphilis and its disastrous *sequelæ* by prostitution-regulation. Intelligent papers on the treatment of tetanus by hydrate of chloral, on astenopia, and on public hygiene contribute to the value of a periodical which reflects much credit on the Medical Association of Buenos Ayres.

The Journal of Mental Science. Edited by H. MAUDSLEY, M.D., and THOMAS S. CLOUSTON, M.D. October, 1872. London: J. and A. Churchill.—We have already done ample justice to the merits of two articles in this quarterly—that of Sir Jas. Coxe, one of Her Majesty's Commissioners in Lunacy for Scotland, on the "Causes of Insanity and the Means of Checking its Growth," and that of Dr. Maudsley on "Medical Psychology." Dr. Ireland, the medical superintendent of the Scottish National Institution for Imbecile Children, contributes an instructive paper, the "Classification and Prognosis of Idiocy"; and Mr. J. R. Gasquet, M.B., in the third of a series of studies on the "Madmen of the Greek Theatre," shows a knowledge of the scenic poets of ancient Athens which, we thought, had vanished from our profession with Dr. Musgrave, of Exeter. Treatment of the insane by seclusion finds a temperate and approving apologist in Dr. T. L. Rogers; while Drs. D. H. Tuke and T. W. Macdowall contribute intelligent and suggestive papers on the "Influence of the Mind on the Body," and on "Progressive Muscular Atrophy." The psychological retrospect, the reviews, and the miscellaneous sections of the journal maintain their character for vigilant and judicious editing.

American Journal of Insanity. Vol. XXIX. No. 1. Utica, New York, 1872.—The United States deserve no small credit for the interest taken and the researches made by their physicians in psychological medicine. Besides the well-known quarterly edited by Dr. Hammond, the periodical before us investigates that fascinating subject with care, acuteness, and practical suggestiveness. It contains at least two original and meritorious articles: that on "Theories of Evolution," in which Professor Huxley is taken severely to task for impetuous partisanship of a premature generalisation; and that on "Insanity and Physical Disease." The other papers present an interesting account of the "History of Buffalo Asylum," and a warning against the excessive hypodermic use of morphia in the case of an insane woman from whose body three hundred needles were removed! The rest of the journal consists of translations from French or German medico-psychological literature; reviews of books; and a summary of the mos recent papers on the diagnosis and treatment of insanity.

The Monthly Journal of Microscopical Science for October contains the following papers:—1. On Bog Mosses (Sphagnum neglectum), by Dr. Braithwaite. 2. On Tolles's One-fifth and Powell and Lealand's One-sixteenth, by Dr. Woodward. 3. On the History, &c., of Nematophycus Logani (Prototaxites Logani, Dawson), by Mr. Carruthers. 4. On the Active Part of the Nerve-fibre, and on the probable Nature of the Nerve-current, by Dr. Beale. 5. On the

Regeneration Hypothesis, by Dr. Louis Elsberg, of New York. 6. On the Use of Monochromatic Sunlight as an Aid to High-power Definition, by Dr. Woodward. 7. One of our Common Monads, by Professor Tuttle.

Foreign Gleanings.

ON THE VALUE OF SULPHATE OF CHINCHONA.

M. BRIQUET, the well-known author of an exhaustive treatise on chinchona, advocated the properties and uses of sulphate of chinchona at a recent meeting of the Paris Academy of Medicine. His conclusions were based upon 893 authenticated cases of cure by the sulphate, from Magendie and Chomel to our days. Its success was especially great in cases of intermittent fever of middling intensity. Furthermore, it arrests the paroxysms of typhoid, amends the symptoms of intermittent neuralgia, and is of great benefit in acute articular rheumatism. Dr. Briquet lays great stress on the mode of administering the drug. It should be given in a watery solution, in doses of from fifty centigrammes to one gramme (eight to fifteen grains), according to the intensity of the fever. The whole dose must not be given at once, but must be divided over five or six hours, and it is extremely important that the substance should be taken during the apyretic interval, and at least eight or ten hours before the return of the fit.

EXTRAORDINARY CASE OF ABDOMINAL MALFORMATION IN A YOUNG GIRL.

This case is described by Dr. W. A. Freund in a recent number of the *Archiv für Gynäkologie*. He considers it to be an instance of double bowel. There existed in front of the bladder a sort of diverticulum of the large intestine, which opened on the umbilical region in the centre of a tumour, whilst below the pubis, between the labia majora, and a little above the meatus urinarius, were to be found the rectum and anus.

ON MYOCARDITIS AND ENDOCARDITIS IN CASES OF DIPHTHERIA, CROUP, AND MEMBRANOUS ANGINA.

In a lecture recently delivered at the Hôpital des Enfants, Dr. Bouchut laid stress on the frequency of disease of the heart in cases of diphtheria and other septic diseases. The endocarditis, he said, was valvular and parietal, of a proliferating character, and was accompanied by fibrinous deposits on the diseased walls, and of large ventricular clots. The fibrinous deposits adhering to the diseased valves may become loose, and be carried away by the blood into the aorta or pulmonary artery, and there give rise to embolisms. These embolisms form infarcti of the lungs, followed by metastatic abscesses and cutaneous infarcti, with or without consecutive abscesses and infarcti of the brain, which may produce cerebral softening.

SIMPLE DISLOCATION BACKWARD OF THE FIFTH METACARPAL BONE AT ITS CARPO-METACARPAL ARTICULATION; REDUCTION.

Dr. Mason, of Brooklyn, in the August number of the *New York Medical Journal* records a case of this kind. On examination, a distinct bony elevation was observed on the back of the hand, in a situation corresponding to the carpo-metacarpal joint of the fifth metacarpal bone. Forcible flexion of the metacarpal bone increased the deformity. The patient was anæsthetised and reduction easily effected by fixing the thumbs firmly against the articulating surface and pressing steadily forward, at the same time extension being made at the distal extremity of the bone. The first effort proved successful.

NOCTURNAL INCONTINENCE OF URINE TREATED BY HYDRATE OF CHLORAL.

Dr. Girolamo Leonardi has recorded, in the *Ippocratico* of Naples, the results of the use of chloral in three cases of incontinence of urine. The administration of the drug very rapidly effected complete and permanent cure. Together with the administration of chloral, Dr. Leonardi recommended very little drink to be taken in the evening. In the first case, a scrofulous woman, aged twenty-four, who had been constantly suffering from the complaint since the age of eighteen, chloral administered in doses of fifteen grains every night during five nights, and of fifteen grains every second night during ten nights, was remarkably successful. The incontinence was immediately stopped. A course of chloral was continued from time to time. The second case was that of a child, aged seven, who took only one-third of a grain of chloral for five nights. The third case was quite as successfully treated in the same way.

CHLORAL HYDRATE IN PERTUSSIS.

Dr. Brynberg Porter, physician to the New York Free Dispensary for Sick Children, thus sums up his experience of chloral hydrate in pertussis, as exhibited at the dispensary:—"I am fully convinced of the marked effect of chloral hydrate in alleviating the symptoms of pertussis, and that there seems to be some evidence (though my number of cases is certainly very limited) to show that it has a positive effect in cutting short the disorder. It is the only remedy I have employed in this affection at the Children's Dispensary for some time."—*New York Medical Journal.*

A NEW MODE OF ADMINISTERING COPAIBA.

Dr. Wehner, of Pennsylvania, has obtained, in chronic cases of gonorrhœa, excellent results from copaiba without any of its nauseating inconveniences by administering the drug combined with opium in the form of rectal suppositories. He recommends the following formula:—Copaiba, six ounces; opium powder, five grains; oil of theobroma, and spermaceti, of each an ounce and a half; from forty to sixty grains of white wax, for twelve suppositories; one to be introduced morning and night.

EXPERIMENTS WITH CONDURANGO.

Professor Giannuzzi and Dr. Bugalini have been carrying on a series of experiments with condurango in their laboratory, and have found that it is a strong poison. A concentrated decoction of condurango (twelve grammes of the substance to 600 of water, reduced to thirty grammes) or the powdered bark mixed into a paste with a little bread (about ten grammes, or two drachms and a half) are enough to poison a dog. Tonic convulsions are produced, with paroxysms like those induced by poisoning with strychnine, and finally a tetanic condition ensues, followed by death. The authors state that condurango seems to be quite useless for therapeutical purposes, unless it be employed as a succedaneum to preparations of strychnia, in cases of paralysis and other diseases which require tetanising remedies.—*Lo Sperimentale*, Ottobre, 1872.

RENAL CALCULI IN CHILDREN.

Dr. Jacobi, of New York, out of forty-six post-mortems of children under six months of age, has found renal calculi in six cases, and concludes that they are congenital, or date from the first weeks of life. He records two cases in which the passage of renal calculi through the ureters produced violent fits of pain and screaming. Generally these attacks of nephritic colic are overlooked.—*Gaz. Hebd.*, No. 29.

TREATMENT OF CHOLERA BY MEANS OF LARGE QUANTITIES OF WATER.

At a late meeting of the Paris Academy of Medicine Dr. Netter advocated the above means of treatment, as much as twenty litres of water being administered in the twenty-four hours. Dr. Netter necessarily bases his plan of treatment on the theory that cholera is a poisoning, the toxic agent of which is eliminated by the evacuations, and that the blood is thus deprived of its serum, and coagulates. The huge drinks are meant to supply the want of serum. The author did not say whether he added salt and albumen.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The first meeting of the session was held on Friday evening, October 11th, 1872, Dr. Prior Purvis in the chair. The following gentlemen were elected officers of the Society for the session 1872-73:—President: Dr. Ralph Gooding. Vice-Presidents: Dr. John Anderson and Mr. Charles Nind. Council: Mr. John Moulden Burton, Dr. William Carr, Dr. Samuel Giles, Mr. William Lockhart, Mr. Frederick Moon, Mr. John Prior Purvis, and Mr. H. W. S. Sturton. Treasurer: Dr. Prior Purvis. Secretary: Mr. Harry Knight Hitchcock. Librarian: Mr. George Granville Bothwell.

THE LANCET.

LONDON: SATURDAY, OCTOBER 26, 1872.

THE subject of puerperal mortality is one of great interest to the medical profession. Nothing in practice is more depressing to the practitioner than the death of a mother in childbirth. This is doubtless chiefly attributable to the very great rarity of the thing, leading practitioners to feel that labour is a physiological process, the result of which in the great majority of cases is satisfactory. It is right to keep the subject of puerperal mortality before our readers in order that it may be reduced to a minimum. It is satisfactory to learn that death from childbirth is very much less than it used to be. We have before us the Report of the Registrar-General for the year 1870. From this Report, or rather from Dr. FARR'S letter appended to it, it appears that, whereas in the four years 1847–50 no less than 59 mothers died to every 10,000 children born alive, in the four years 1867–70 the deaths had sunk to 45. One means by which this mortality can be further reduced, and perhaps the most important, is by every practitioner giving the fullest particulars of the nature and causes of such deaths when they do occur, specifying the time which has elapsed from delivery, the nature of the labour, the duration of it, and, very specifically, the character of the fatal illness. It is by means of more perfect information as to the causes of puerperal mortality that the reduction of it has been effected. For example, it has been demonstrated by Dr. COLLINS, Sir JAMES SIMPSON, and others that labour is fatal in proportion to its duration, especially the duration of the second stage of it—viz., that beginning with the full dilatation of the os uteri and ending with the delivery of the child. The demand upon the vital powers made by the severe pains, and the direct pressure of the child upon the maternal parts, leading to local inflammations and sloughings, make the prolongation of this period of labour a very serious matter. Fortunately, we have in the forceps a powerful and not unsafe means of controlling the duration of this stage of labour. The timely use of the forceps, shortening the second stage of labour, is the great practical improvement in recent midwifery. Bearing on this very important question, we shall quote a sentence from a letter written to Dr. FARR, and given at length in a supplement to his own letter. It is from Mr. RIGDEN, of Birmingham, a practitioner of large experience in midwifery, and who has to record a mortality of only 9 deaths in 4390 cases. Mr. RIGDEN says:—

"It may not be of consequence to you, but I may inform you that for several years past I have accelerated with the forceps many labours which at an earlier period of my practice would have been left much longer to the natural efforts; and I am confident that this has not only been very beneficial to the mothers, but has saved a considerable number of children who would have been lost under the former treatment."

We revert to the importance of carefully drawn certificates of death in obstetric cases on the part of general practitioners, who attend the great majority of them. Medical men have really no reason to withhold their returns of fatal cases. For all investigation shows that the mortality from midwifery in ordinary practice is very small. Some eminent obstetricians have been so surprised at this fact as to attempt explanations of it not very complimentary to general practitioners. Dr. FARR'S vindication of the certificates of death in obstetric cases is no more than is due to medical men who supply these certificates. The profession will be not the less grateful to him for the trouble he has taken to demonstrate what should not have needed demonstration—the candour of these returns. Even so careful and accurate a writer as Dr. BARNES is quoted by Dr. MATTHEWS DUNCAN as having written the following sentence:—

"It is stated in the Registrar-General's report for 1856 that the mortality in childbirth in England and Wales in 1847 was 1 in 167, and that it had fallen to 1 in 227 in 1856. Now, having applied to Dr. Elkington for the puerperal statistics of Birmingham, I learn that the registrar of that town says that no one ever specifies the deaths in childbed or from puerperal fever."

It is surely very illogical to argue from the case of one town to the case of England and Wales. But Dr. FARR shows in his letter that the very report of 1856 refutes this statement even as regards Birmingham itself. Strangely enough, says Dr. FARR, we find in the very report quoted this fact—that in the Birmingham district, where nearly all the causes of death are returned by the medical practitioners, they returned in the year 1856 *five* deaths from *puerperal fever*, and seventeen deaths from other causes connected with childbirth. But Dr. FARR does not content himself with this refutation of Dr. BARNES'S statement, which has been much quoted as partly explanatory of the apparent difference between the mortality of midwifery in hospitals and in the practice of eminent accoucheurs and midwifery in the private practice of general practitioners. Dr. FARR has been at the trouble of ascertaining the degree of error in the London Returns on this subject. The London weekly tables during six weeks were scrupulously examined. Confidential inquiries were made of the medical attendant in every doubtful case, with this result—that only *one* doubtful death by childbirth was not so returned as to be easily distinguishable. The births during six weeks were 12,814. The deaths returned as caused by childbirth were 66. One more, according to Dr. FARR'S confidential inquiries, should perhaps have been added, making 67, or a mortality in London of only 1 in 191. If this death be not included, the mortality was at the rate of 1 in 194. Probably this includes the deaths in the lying-in hospitals, or the numbers would be still more suggestive of the little risk to life in ordinary midwifery out of hospitals. It is this slight mortality in general practice, as compared with the mortality of hospitals and the experience of some eminent practitioners, that excites the ingenuity sometimes more than the admiration of obstetric writers. Dr. MATTHEWS DUNCAN, after a careful search of the Scotch registers, found that 153 mothers died out of 16,393 within six weeks after delivery, or 1 in 107. From certain returns of private practice he infers a mor-

tality not very different from this. From all his researches he gathers *that not fewer than 1 in every 120 women delivered at or near the full time die within the four weeks of childbed.*

Sir JAMES SIMPSON records a mortality, at a certain time, of 4 in 180 deliveries. The attempt to establish a training school for midwives in connexion with King's College Hospital a few years ago had to be abandoned, for, with every care, one mother in 29 died. This, according to LE FORT, is the usual mortality of maternity hospitals. Dr. FARR estimates the maternal mortality prevailing in England as not more than 5 deaths to every 1000 deliveries, or of 1 to 200. The contrast of the mortality of midwifery in general practice and that in lying-in hospitals has now been demonstrated so fully as to make these institutions, except on a small scale and in an easily demolished shape, quite indefensible.

Eminent accoucheurs must expect to have an exceptional mortality. They are consulted in the worst cases; and the profession will put no uncharitable construction on their number of deaths unless provoked to such an unchristian procedure by reflections on the candour of the certificates of general practitioners. But though we follow Dr. FARR in vindicating the certificates of general practitioners and admiring the results of their obstetric practice, we may still urge on the profession the utmost care and detail in certificates of death in childbed cases. By such means we shall acquire data which will lead to a still better understanding of a class of deaths which we all deplore.

THE existing mode of selecting members for election to the Fellowship of the College of Physicians has been repeatedly condemned in our columns as wholly unworthy a professedly learned body—one which claims, moreover, to be the representative centre of the physicians of the country. On many occasions we have had to point out glaring injustice done to deserving members of the College who have been repeatedly passed over for the honour of Fellowship, simply because they do not happen to be known to the majority of the existing members of Council, and in favour of junior men who happen to possess a friend at court at the time, and whose selection for the coveted distinction of Fellowship is sometimes as much an astonishment to themselves as to their *confrères*.

This question of election came up for discussion once more at the meeting of the College held on Thursday, the 18th instant. At present ten out of the nineteen members of Council must vote for the selection of a candidate to be put in nomination for election by the body of Fellows. It is requisite, in fact, that he should have a majority of one in the Council, ten members forming a quorum. Dr. F. FARRE moved that in the bye-law on the subject the words—"the votes of a majority of the Council present"—be substituted for "votes of at least ten members of the Council." This motion was made chiefly on the ground that individuals might be most rightfully entitled to the Fellowship and yet be unknown to ten members of the Council. In the discussion which followed, it was openly and freely acknowledged by every speaker—by Dr. BARCLAY, Dr. WEST, Dr. STEWART, Dr. HAWKINS, and others—that injustice was frequently unwittingly done in the way above indicated, the result being that the election of certain members was unfairly postponed—an occurrence that necessarily entailed a certain slur upon the professional status which they occupied in the estimation of the profession generally; the President himself adding that strict justice was not done in the matter, and that the action of the Council often acquired the character of caprice. The prevailing system of Fellowship election stands, therefore, condemned at the hands of the highest officials of the College; and this wholesale acknowledgment by them of its glaring inconsistencies is so far satisfactory. The motion of Dr. FARRE was not carried, but an amendment of Dr. BARCLAY'S, referring the subject to the Council for consideration and report was agreed to. Now it is not so much against actual selection by the Council as the absence of proper means for enabling the Council to become acquainted with the comparative merits of fit candidates and of learning the opinion of the body of Fellows on this subject that complaint is made, for the Council themselves affirm that most of the injustice done proceeds from their ignorance of the claims of different members.

Dr. C. J. B. WILLIAMS'S motion, carried some time since, and by which any two Fellows could nominate a candidate, was a step in the right direction, but, as it turns out, has become almost a dead letter from its insufficiency. What is needed is a plan similar to that—as suggested by Dr. BEALE—by which candidates for the Royal Society are nominated for the Fellowship of that body, and which would allow the voice of the Fellows at large to be distinctly heard in the matter. Such a plan might well be guarded by a "solicitation" clause strictly forbidding all canvassing, and the names of candidates might be suspended in public some time prior to the day of balloting. It is wholly inconceivable that the Fellows could admit any black sheep amongst them. Above all things it is necessary that the Council should cease to sit with closed doors listening to the often idle and more frequently unfounded rumours and tittle-tattle which are filtered round the Council table, possibly to the everlasting disparagement of this or that member, who can only guess by being repeatedly passed over that some calumnious slur has been cast upon him which, be it ever so untrue, he will never have the chance of refuting, but which may influence his career perhaps for the remainder of his days. This un-English plan may have been suited to the time when the College was a mere club, but is wholly unworthy its present position and ambition. We trust the Council will go into this matter with the determination to sweep away the oft-exposed abuses of the existing mode of Fellowship election.

THE interest with which Phosphorus has hitherto been regarded has been mainly due to its remarkable toxicological effects. Its medicinal value has been less carefully studied, partly on account of its nauseous taste, and partly on account of the alarming symptoms that have supervened even when cautiously administered. It has been chiefly given in cases where the nervous system is depressed, as in the later stages of fevers, in mental diseases accompanied by depression, and in impotence; and it has also been given

in certain skin affections. Its most remarkable effect, when taken for some time in small but poisonous doses, is the production of fatty degeneration of the liver, kidneys, stomach, and heart; and, at a later period, the establishment of a similar condition in the voluntary muscular system generally, in the unstriated muscular tissue of the intestines, and even in the lungs. Numerous hæmorrhages occur in all parts of the body; and this, according to the investigations of Dr. GEORGE WEGNER, of Berlin, who has recently published an important essay on the subject in VIRCHOW'S *Archiv*, is due to an extension of fatty degeneration from the heart to the entire arterial system. This can be most easily observed in the microscopic vessels of the brain, cancellous tissue of the bones, and the liver. In women, if the poison has been taken for some time previous to menstruation, it leads to profuse menorrhagia and to the escape of much blood into the Graafian follicles, causing hæmatomata, often of considerable size. Its action on the jaws is well known; and M. WEGNER reports a case which seems to prove that other bones are very liable to be in a diseased condition in those who work with phosphorus. M. WEGNER'S essay, however, is interesting chiefly as showing the influence of phosphorus on the nutrition of the bones. His experiments, mainly conducted on dogs and rabbits, demonstrate that minute doses of this substance act as a specific stimulus upon the osteogenous tissue. If the very diluted vapour be allowed to act upon the exposed periosteum of a bone, it induces periostitis and consecutive hypertrophy of the osseous tissue; in more concentrated amount, it may, in addition, cause suppuration of this tissue. If the animal be exposed to the vapour in a still greater degree of concentration, the action upon the osseous system does not advance beyond a certain point, but disorder of the digestive system becomes the most prominent symptom. The interstitial connective tissue of the liver and of the stomach becomes irritated, and chronic indurative gastritis and chronic interstitial hepatitis, with icterus and ultimately cirrhotic atrophy of the liver, result. The peculiar action of phosphorus upon the bones naturally suggests that it should be employed as a therapeutic means in all diseases of children in which the activity of the osteogenetic processes is impaired, as well as in ununited fractures, subperiosteal resections, and periostitic transplantations. If its use be determined upon, it is probably better to employ it in substance rather than in combination, whether in the form of phosphites or of the phosphates, since in the latter, to be of any service, it must be given in doses that seriously interfere with digestion.

THE inaugural address delivered before the Association of Medical Officers of Health by Dr. LETHEBY, the President, on Saturday last, opened out a very important question in connexion with the working of the Adulteration Act. Is it or is it not advisable that health officers should apply for or accept the post of analyst under the Act? The question was referred to a committee of the Association, and hence very little was said on the subject at the meeting. It appears to us, however, that some decided action should be taken in the matter, and that speedily. Unity is strength; and if a line of conduct be agreed upon and adopted by all concerned, the working of the Act will be far more satisfactory. According to our own knowledge and belief, medical officers of health are not, as a rule, properly competent to perform the chemical and analytical work required without special and skilled assistance. But it is equally plain that in each and every district the health officer and the analyst must work together. It is reported that in the district of St. George's, Hanover-square, a medical man and a chemist are canvassing together for the two appointments, and, without any reference to the candidates concerned, we take this, as a matter of principle, to be a very sensible proceeding. Many important hygienic considerations affecting the spread or prevention of disease are involved in the work of the analyst, which to be properly utilised must require the practical aid of the medical officer; and, again, the latter would be (and, indeed, is now) frequently obstructed and delayed in the proper performance of inspectorial work because he has not sufficient time or a sufficiency of special knowledge to sift matters thoroughly that require somewhat close chemical analysis. The President of the Association, in the course of remarks made subsequent to the inaugural address, suggested for the consideration of metropolitan health officers that they should all apply for and accept office under the Adulteration Act, and should by combined action establish two large laboratories, one on each side of the river, where a sufficient staff of skilled assistants and all necessary appliances could be maintained in efficient working order, and that all articles to be examined should be sent by the district officers to these two "head-quarters" establishments. It appears to us that, in the interests of all concerned, this suggestion is eminently practical, and worthy of serious consideration; for we are convinced that the Public Health and Adulteration Acts will not be successfully administered unless the practical knowledge and power of the health officer be aided and strengthened by the skilled analyst.

Medical Annotations.

"Ne quid nimis."

THE COLLEGE OF SURGEONS.

THE resolution of the Council of the College of Surgeons, which we published last week, shows their determination not to exert the power vested in them by the College Charter of 1852, to elect annually two Fellows from among members of the College of a date subsequent to 1843. This determination will doubtless be received with displeasure by certain gentlemen in various parts of the provinces, who, having for various reasons abstained from presenting themselves for the Fellowship examination, now seek to be elected to that honour. So long as members dating before 1843 continue to be elected on payment of £10, it does seem a little hard that a fellow-townsman who happened to pass the College a few months later should be entirely debarred from the same honour. If the Council wishes to be consistent, it should decline to make any more elections to the Fellowship, and let all candidates row in the same boat. Certainly it would be very disastrous to hold out any prospect to young surgeons of becoming Fellows in any other way than by study and learning, but we could wish that exceptional cases (which are few in number) should be

treated by the exceptional method provided for by the Charter.

The resignation of an examinership by Mr. Busk will doubtless lead to the election of Mr. Birkett, the next in seniority on the Council to Mr. Spencer Smith. In the existing transitional state of things in respect of the conjoint examination scheme, it is not to be expected that the Council will care to go beyond its own circle for an examiner, nor, indeed, should we desire it on the present occasion. Mr. Birkett is Examiner in Surgery at the University of London, and is therefore not without experience which may possibly help to equalise a little the unsavoury returns of passed and plucked from the several metropolitan schools. It is true that this is the first occasion on which, in accordance with a recent resolution of the Council, the vacancy has been advertised, and "Fellows desirous of being considered candidates for the office" have been invited to send in their names; but this notice must be taken *quantum valeat*. If the Council acted up to the letter of its own resolution of March 22nd, 1870, by which not less than one-half of the Court were to be Fellows outside the Council, there would of necessity be on the present occasion an infusion of new blood; but, for the reasons given above, we regard this event as hardly probable.

THE "CAT" IN NEWGATE.

A LETTER addressed to the *Daily News* by Mr. A. P. Taylor has reopened the subject of the advisability, or rather the humanity, of inflicting corporal punishment upon men who have been found guilty of crimes accompanied by violence. The active part that was taken by this journal in effecting the suppression of military flogging subsequent to the punishment and death of Frederick John White in 1846 is sufficient evidence of the feelings we have always entertained in regard to the severe floggings that were formerly frequently administered for comparatively trivial offences. The results of the inquiries made by Mr. Erasmus Wilson in that particular case, as well as other evidence that was subsequently adduced, demonstrated that the infliction of a hundred and fifty lashes not only severely lacerated the integuments, but also so seriously impaired the nutrition of the deeper-lying muscles of the back that a month after the punishment had been received they were reduced to the condition of a pulp; and, further, that pleurisy, pneumonia, and a kind of degeneration of the heart, rendering it flabby and friable, with endocarditis and pericarditis, were conditions that might easily be established. With the verdict of the jury in that case we then were and still remain in perfect accord: we still hold such punishment to be "revolting and disgraceful." Nevertheless, we are by no means prepared to recommend that flogging in the far milder form in which it is now inflicted should be utterly abolished. The number of lashes is limited; and, though sufficient to punish severely, there does not appear to be any reason for believing that a few stinging blows are capable of seriously injuring the general health.

It is obvious that no punishment should be too severe or disproportionate to the offence committed, and it is clearly a mistake to continue it till pain ceases to be felt, whilst such deeper injury may be inflicted as may jeopardise life. Yet punishment in one form or another is the certain result of every infraction of the great social laws, and physical punishment appears to be the only kind that will act upon natures such as Cohen and his associates. We are not surprised at the language held by Mr. Taylor. No doubt it is shocking to a sensitive and cultivated mind to see a fellow-creature lashed as no animal is now knowingly permitted to be beaten, but then it must be remembered that the dispassionate, though stern, action of the law here replaces the irregular and violent promptings of revenge, whilst it is difficult to see by what other means a recurrence of such crimes can be prevented than by a direct appeal to sense. Could such a result be hoped for from imprisonment alone, even though aided by the ministrations of the chaplain? Imprisonment has little terror in the eyes of such as these. They are confined and kept to work it is true; but, after all, it "doesn't hurt," and an hour might be spent worse than in "argufying" with the chaplain; but the "cat" is a less pleasant companion, and has anticipatory and posthumous reflections connected with it that are not altogether agreeable. In view of the decided decrease admitted on all hands to have resulted from this plan, and in the absence of any charges of serious mischief effected by it, we are at present for no change.

THE BURDWAN FEVER.

IT is a well-worn platitude to say that we are wonderfully little concerned with any calamity, however great, occurring at a great distance. It must be near to be realised; but when near, an occurrence, which is utterly insignificant if contrasted with the effect of an earthquake or huge epidemic, possesses a powerful interest. A dreadful epidemic of fever has been prevailing of late in the city and province of Burdwan, by which a large number of the population have been killed, and a still larger number prostrated. The Viceroy, as head of the Government of India, has done what he could towards the relief of the sufferers; but the epidemic has been too great for any one adequately to cope with the sickness and famine it has produced. Whole villages have been fever-stricken, and the district of South Burdwan is stated by an eye-witness to have presented one uniform and lamentable scene of disease and misery. In one month no less than 114,000 persons applied for medical relief in the district. The fever is no new disease. It has been prevalent to some extent for the past ten years on both sides of the Hooghly. It broke out with great virulence in 1869 in the town of Burdwan, and in 1871 it reappeared with the same virulence. The magistrate of the district states that at the time he assumed charge almost every human being in the town was more or less affected with fever. All classes suffered: the officials either had been or were affected, the district police were prostrated, and the disease largely prevailed in the gaols, as well as among the servants employed on the East Indian Railway Company's premises. Dr. Elliot, the resident civil surgeon, was attacked by the fever and died. Lord Northbrook, when visiting the Medical College, Calcutta, adverted to "the dreadful fever which had been desolating the districts of this province," in connexion with his expression of a hope that the native medical men would strive to grapple with the difficult sanitary problems present in India, and, among other things, discover the real causes of this fever. From the descriptions of the disease that have reached us we do not think that there can be much doubt as to its real nature, or that of the work which will have to be undertaken to remove or mitigate its causes. As in the case of the Mauritius, the disease appears to be endemic and mainly dependent upon local conditions, sometimes prevailing with exceptional severity in an epidemic form. All medical observers seem to be agreed as to its nature. It consists of different forms of intermittent and remittent fever, with splenic enlargement, and other concomitants and sequelæ of malarious affections. The officiating Sanitary Commissioner, Dr. Payne, states that there has been a gradual silting-up of late years of the natural drainage outlets, and that, practically speaking, the subsoil of the district is undrained. We are of course ignorant of the nature of malaria, but that its presence is intimately associated

with an undrained or badly-drained subsoil there can be no doubt. It would appear, moreover, from several facts that have been adduced, that impure drinking-water is one of the causes of the prevalence of this disease. We understand that a comprehensive survey is about to be undertaken for the purpose of ascertaining the facts and determining as to what had best be done; and the sooner it is set about the better. Why not get Mr. Clark, the sanitary engineer of Calcutta, to drain the waterlogged land?

AMMONIA IN THE URINE IN HEALTH AND DISEASE.

WE have received an abstract of a paper presented to the Royal Society by Drs. Tidy and Woodman, of the London Hospital, containing a series of investigations instituted by them in regard to this subject. The total number of cases upon which observations were made exceeded 200. The authors, after alluding to the researches of Dr. Andrew Clark, Neubauer and Vogel, and others, describe the method adopted by them for obtaining the quantity of ammonia present. It consists in diluting the freshly-passed urine with a given bulk of distilled water, sufficient to destroy all colour, a known quantity of the urine being taken in each case. The tint-depth produced by the addition of an excess of Nessler's solution is compared with that arising from known quantities of ammonia in a similar bulk of liquid when treated with the same solution. The trace of ammonia in the water is, of course, allowed for. The authors' observations are extensive, and the results of some physiological and pathological interest. They regard 60 oz. as the normal daily excretion of urine in adults, and conclude that the average daily excretion of ammonia in health is rather less than 2·5 grains per diem. The results were modified by several conditions; for instance, as regards age, the amount of ammonia was largest under thirty-five, to the extent of a little over one-third; the amount after meals was nearly double that excreted before, indicating that a large proportion of the urinary ammonia is derived from the food ingested; and exercise also increases the quantity excreted. Before dealing with special diseases, the authors examined the influence of several general conditions both of the urine and of the patients. The results obtained are interesting, but need not be here recapitulated. As regards special diseases, the authors' experiments go to show that in erysipelas, small-pox, enteric fever, and typhus fever, the amount of ammonia excreted is less than one-fourth that of health. In rheumatic gout, as the result of four observations, the quantity was nearly double that of health. In the cases taken just before death there was a very remarkable decrease, eight instances giving an average of only 0·0304 gr. per 1000, and in two cases it was entirely absent.

VENTILATION OF THEATRES.

IT is satisfactory to know that the remonstrances often recorded in our pages on the ventilation of public buildings have induced the managers of most of our metropolitan theatres to endeavour to set their houses in order, and to provide some special system of ventilation. Rapid strides have been made of late years in the architecture and general arrangements of our playhouses, and now, for the most part, if people choose to pay, some consideration is shown for the comfort of their knees and backs. But, until very recently, no sort of care appeared to be given to ventilation, and in many parts of the majority of our London theatres, the atmosphere, even on a moderately full night, was positively pestilential. Mr. Hollingshead at the Gaiety Theatre first succeeded in inaugurating a better state of things, and there is no doubt that this house is now, in most parts, comparatively cool. The Adelphi Theatre has been entirely refitted during the autumn recess, and the opportunity was taken to introduce several ventilating arrangements that add greatly to the comfort of the audience. A very large opening has been made in the ceiling, immediately above the chandelier, and eight others around it, concealed by ornamental work, so that a very powerful up-cast now exists. Each balcony box is fitted with a large square opening immediately above the door, covered externally with perforated zinc, and the top of the chief entrance to the balcony stalls is fitted with open wire-work; and it is evident that the combination of these two simple arrangements tends in a great degree to obviate the excessive and oppressive "stuffiness" that exists in some theatres at the back of the boxes and dress circle. The temperature at the time of our visit, at 9 P.M., with a moderately full house, was as follows:—Stalls, 78° Fahr. (curtain up); centre of upper circle, 77°; upper gallery, 83°; pit, 85°. These observations were all taken in what appeared to be warmest situations—i.e., at the back and centre of pit and gallery. The urinals and closets, with both of which the theatre is well provided, are conveniently built, very cool, and exceptionally free from smell. We may record parenthetically, that the Adelphi is now provided with an excellent system of exits in case of fire, and that since it has been introduced, an audience of 1700 persons got out of the building without difficulty in nine minutes.

The theatre season is just commencing, and it is the duty as well as the interest of managers to assist the prevention of disease, by using all the means in their power to purify the internal atmosphere at night, and to let in as much fresh air as possible during the day.

DOG-BITES AND SNAKE-BITES.

WE think it was Sir Thomas Watson who said of a living physician, eminent for the accuracy and lucidity of his observations, that for his opinions he had a very great, and for his facts an absolute respect. It is our fate to peruse communications that appear from time to time regarding the cure of such maladies as hydrophobia and snake-bite; but we must say that the opinions of the writers are entitled to very little, and their facts to absolutely no respect whatever. There is no such thing as a cure for hydrophobia. When that disease has once declared itself by its characteristic symptoms, the sufferer is beyond the reach of art, and apparently the efforts of nature also. But it may be asked, Does this frightful disease ensue in everyone who has been bitten by a mad dog? Assuredly not! And it is this frequent immunity from the disease in persons who have been bitten, as Sir Thomas Watson sagaciously remarks, that has tended to confer reputation upon so many vaunted methods of prevention. As to the application of Indian ink and the subsequent washing of the wound until every trace of the ink is removed, the object of this procedure is apparent enough—it affords an easy method of testing the thoroughness of the ablution. But it is absolutely dangerous if employed as a substitute for the early excision of the wound. The procedure to be adopted in the case of dog-bites is essentially the same as that to be pursued in snake-bites, and it is hopeful and reliable in proportion to the promptitude displayed.

The subject of snake-poisoning has been most exhaustively and experimentally studied of late by Prof. Fayrer, of the Calcutta Medical College. Whatever may be said of the antidotal effects of a solution of ammonia in the case of Australian snakes, Prof. Fayrer's experiments have abundantly demonstrated that it possesses no such influence in the case of the poisonous snakes of India. In one case, that of a large and powerful dog, notwithstanding that

Prof. Fayrer injected cobra poison and the so-called antidote simultaneously into a large vein, the result was almost instant death. The respiration had ceased and then complete unconsciousness within one minute, and death ensued in two minutes and a half after the injection. So subtle and virulent is the nature of the cobra poison, that if it enters into the bloodvessels in sufficient quantity, and be carried to the nerve-centres, there is scarcely time for anything to be of much avail. Most of the cases of snake-bite that recover are those in which the bite has been imperfect, the quantity or quality of the poison deteriorated, or the snake itself young, weak, exhausted, or belonging to a less poisonous family.

The object in the case of bites of poisonous animals being to prevent the absorption of the poison, common sense would suggest the plan that scientific inquiry has shown to be the best—viz., the immediate application of a tight ligature to the limb; the excision of the wound, followed by the sucking of it to encourage the bleeding, and the free application of a caustic.

THE MEDICAL SOCIETY OF LONDON.

GREAT interest is centred in this Society at the present period, as it is on the point of completing the hundredth year of its existence. From the brilliancy of the first meeting of the session on the 21st inst., from the energy displayed by the Council in securing new and extremely suitable premises in Chandos-street, from the great accession of members, and from the value of the communications made at this first meeting, it may be inferred that this Society well sustains the trust handed down by its founders, and bids fair to prove a vigorous centenarian. It had long been felt that the house now occupied was not well adapted to the objects of the Society; and the Council, headed by Mr. Bryant, the very active president, had for some time past used their utmost endeavours to secure appropriate premises—a task of no small difficulty. The President, after welcoming the numerous members present, laid before them the work done by the Council, together with the plans of the house which had been secured, and obtained a unanimous vote of approval. The Society may be congratulated on this first start in the session; and everything promises that it will be well worthy of ranking with the most successful session of the ninety-nine which have preceded it.

THE LOBES OF THE LIVER.

THOSE who have not confined their anatomical studies to the dissection of man, but have now and then opened the thoracic and abdominal cavities of lower mammals, must have often been puzzled by the seeming confusion in the lobular arrangement of the liver. Here there was no right and left lobe to guide the dissector, as in anthropotomy, but masses of liver substance, strange in shape, in number, and in arrangement, seemed to dangle at random from the hepatic vein. How were names and descriptions to be found for each lobe without much circumlocution and an elaborate terminology? and, what was of more importance, how were these structures to be satisfactorily compared with their presumable homologues in man and in other mammals?

Thanks to Professor Flower, all this seeming tangle has been unravelled and reduced to order and system in a paper "On the Arrangement and Nomenclature of the Lobes of the Liver in the Mammalia," lately read by him before the British Association at its Brighton meeting. In justice, however, to Professor Rolleston, we may state that several years ago he employed, in certain of his lectures on comparative anatomy at Oxford, some systematic terminology conformably to which his diagrams were coloured, which greatly simplified, as we know from experience, the description of the livers of the various mammals which we either saw dissected or dissected for ourselves.

According to Professor Flower's system, the umbilical vein may be taken as a kind of vertical datum line dividing the liver primarily into a right and a left segment, which when undivided may be termed lobes. Each segment is, in many mammals, divided by a vertical fissure, which may be respectively termed a right and a left lateral fissure, into two lobes, the central and lateral lobes of the right and left sides respectively—the right central corresponding to the lobe formerly termed "cystic," "middle," or "suspensory," and having the gall-bladder, when there is one present, "always in relation to its under surface." The fossa in which the gall-bladder is sunk may even be continued into a fissure indenting the margin of the right central lobe. This fissure may be conveniently termed "cystic." With regard to the right lateral lobe, which is all that need further concern us, it is always either grooved or tunneled by the vena cava at the inner end of its attached border, while a differentiated portion of the lobe, intervening between this vein and the portal fissure, has been termed long ago the "lobulus Spigelii." This lobule, whatever be its form, is bounded anteriorly by the portal fissure, on the left by the fissure of the ductus venosus, and posteriorly, and partially on the right, by the vena cava. From the lower surface, too, of the right lateral lobe the "caudate lobe" is differentiated by a fissure which may be termed the "fissure of the caudate lobe." Though in man it is almost obsolete, it is of large size in most mammals, being connected by an isthmus with the Spigelian lobe, and being deeply hollowed to receive the right kidney.

Provided with such a guide, and armed with such a system, the anatomist may now with confidence dissect out and describe the liver of any mammal that he may please to select.

THE TIVERTON INFIRMARY.

MATTERS WAX worse and worse in this institution. So we gather from a very reasonable and dignified letter addressed to the subscribers by the four honorary medical officers who resigned. They resigned, it will be remembered, in consequence of the appointment of a house-surgeon, eighteen—not sixteen—years of age, the pupil of one of the members of the medical staff, and whose whole medical education consisted in his having been engaged for fifteen months in dispensing medicines as articled pupil to a general practitioner. Their original dissatisfaction at this appointment was most natural on the grounds that the pupil of a medical man could not be an efficient servant of the infirmary, that it was obviously not seemly that the private pupil of one member of the staff should act as house-surgeon under other members of the staff, and, above all, that he was unqualified and inexperienced. We should add that their dissatisfaction was intensified by their having been led to suppose that a qualified candidate would be accepted by the committee. An advertisement in THE LANCET, bearing no other construction than this, brought several such candidates. One was especially well fitted for the post, but was set aside in favour of the local youth without age, qualification, or experience. Such was the original case of the medical staff against the committee. They resigned. On this step being taken, the committee, with the consistency of men in wrong courses, instead of undoing the wrong appointment, went a-begging for a new staff and made application to all the other medical practitioners in Tiverton to take the places vacated. To their great credit, these gentlemen unanimously refused, whereupon

the committee requested a meeting of the resigned officers with two of their own number. These gentlemen named the following as the terms on which they would resume their position:—

"1st. That the appointment recently made as house-surgeon and dispenser should be immediately cancelled. 2nd. That we should be allowed to recommend his successor. 3rd. That no articled pupil to a resident medical practitioner should in future be eligible for the appointment."

The committee again met on the 14th instant to receive and discuss these terms. The ex-officers have since been informed by the honorary secretary that their terms have not been acceded to. In the letter above referred to, the honorary officers who have resigned decline to hold any further communication with the committee on the subject, and say that they will now only state the conditions on which they will resume their duties to a general meeting of the subscribers. If the honorary officers were originally justified in resigning, as we decidedly think they were, they are now justified in insisting on a meeting of the subscribers before withdrawing their resignation. The committee must be held entirely responsible for any inefficiency of the institution that may accrue pending the appointment of a medical staff. Honorary officers would be untrue to themselves and to the sick of the infirmary and dispensary if they did not have this affair settled, not temporarily, but upon principles that shall be applicable upon future occasions.

THE INFANT LIFE PROTECTION ACT.

The provisions of the Act for the better Protection of Infant Life, passed last session, will come into operation on the 1st November, and the Metropolitan Board of Works as the "local authority" for the metropolis, have, by advertisement in our columns and elsewhere, called public attention to the fact that on and after the date above-named it will be unlawful for any person within the Board's jurisdiction to take in infants to nurse, except in a house which has been duly registered for the purpose. The Board have further referred the Act to a committee, for the purpose of having bye-laws prepared, and also for a report on the arrangements necessary to the effectual carrying out of the Act, the opinion having prevailed that the Board should not be content to act as a mere licensing authority, but that whatever could be done to give a fair trial to the measure ought to be done. Within the City of London the local authority for the administration of the Act is the Corporation; elsewhere it will be the town councils of municipal boroughs, and the justices in petty sessions. The words of the leading clause of the Act are these:—"From and after the commencement of this Act it shall not be lawful for any person to retain or receive for hire or reward in that behalf more than one infant, and in case of twins more than two infants, under the age of one year, for the purpose of nursing or maintaining such infants apart from their parents for a longer period than twenty-four hours, except in a house which has been registered as herein provided."

It has been pointed out by the *Solicitors' Journal* that a great defect in the Act appears to be that there is a total absence of any provision for superintendence, inspection, and control by the local authority, or any other person. Our legal contemporary seems, however, to think the Act "a useful beginning," and that it confers on the local authorities so wide a discretion in some respects as to give them "practically an absolute control over" the houses registered; on the whole, therefore, we presume that where the authorities are really minded to work the Act effectively they will find its terms sufficiently elastic to enable them to do so. If it leads to a marked diminution in the infant mortality, especially of our large towns, or if it only puts a stop to the system of child-murder which baby-farming is believed to have so largely induced, it will deserve to be ranked among the most beneficent of modern legislative efforts.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

At the meeting of this Society on Tuesday last, an elaborate paper was read by Dr. Dickinson, "On the Morbid Effects of Alcohol, as shown in persons who trade in Liquor." The paper was based upon the post-mortem reports of St. George's Hospital during the last thirty years. 140 autopsies had been made during that time, on patients who had died in the hospital, and who had been in a position, from their occupation, of taking alcohol in excess, as brewers' men, potmen, distillers' men, &c. These were compared with the same number of autopsies of patients who had been in the hospital at the same time for various diseases, and who had not been in such circumstances. From these tables alcohol appears to shorten life by about three years and a half, predisposes to the suppurative form of inflammation, and to degeneration of the tissues of a fibroid and fatty character. Its effect on the kidney is not what has been supposed: about an equal number in each class suffered from kidney disease, though the form of degeneration was not the same in the two classes.

THE PROSECUTION OF QUACKS.

We called attention last week to the arrangements which are being set on foot for the systematic prosecution of the advertising quacks by whom the metropolis and other large towns are infested; and we would strenuously urge upon the profession to give their utmost support to this movement, and to endeavour to obtain subscriptions to the prosecuting fund. We say "endeavour to obtain" rather than "give," because the matter is one of national rather than of professional concern, and is of special importance to all fathers of families, as well as to all to whom is delegated the work of instruction. Every medical man can recall examples of young fellows of promise who have not only been shamefully plundered by the class of persons whom it is proposed to put down, but whose prospects in life have been blighted by the means used in order to extort from them the enormous sums which they have paid for the pretended cure of non-existent maladies, or in the shape of hush-money to prevent exposure where there was nothing to expose. It is for the public, who are the sufferers, and not for medical men, who are mere bystanders, to pay for the institution of proceedings by which the public interests are to be served; but, from the very character of the acts which it is sought to suppress, their nature and tendencies are better known to medical men than to other persons, and medical men should therefore be foremost in a systematic endeavour to make plain to their patients the extent of this very crying evil. Not content with the publicity to be gained by advertising in the newspapers that admit their announcements, the quacks in question send out men who infest the public thoroughfares, and thrust filthy pamphlets into the hands of every young man or boy who can be induced to take them. They not only rob their victims by lies and false pretences of the most glaring kind, but they also corrupt public morals by the prurient publications which form so large a portion of their stock-in-trade. The case is one that might be most properly dealt with by the Society for the Suppression of Vice, and placed upon the same level as the sale of obscene prints and photographs. Since, however, this Society is unable of itself to take the matter in hand, we can only cordially wish success to the prosecutions that will be instituted in another quarter.

PHYSIOLOGY OF THE SPHINCTER VESICÆ.

DR. KUPRESSOW states that his experiments were conducted in the same manner as those of Heidenhain and Colberg, a canula containing warm water being introduced into the ureter and kept in position by a ligature and by a simple arrangement. Fresh warm water could be supplied when that first contained in the tube had become cool. The spinal cord was divided at various points with a view of ascertaining the exact position of the centre for the innervation of the sphincter vesicæ muscle. In many of the animals the urethra was slit up to see whether Budge's statement was accurate, to the effect that the urine is retained in the bladder simply by the contraction of the muscular fibres of the urethra. Kupressow's experiments leave no doubt in regard to the tone of the sphincter. After the death of the animals, which were chiefly rabbits, a water column of from eight to sixteen centimetres high in the ureters caused fluid to escape from the bladder, whilst previously a height of thirty-six to fifty-six centimetres was required. Section of the spinal cord at the level of the fifth lumbar vertebra produced the same effects as the death of the animal, though rather slowly. Section at the sixth produced them at once. Division of the cord between the first and fourth lumbar vertebræ had no influence on the height of the column of water at which water began to run from the urethra. He therefore concludes that in rabbits the centre of innervation of the sphincter vesicæ is at the level of the fifth and sixth lumbar vertebræ, and he considers that under the term sphincter vesicæ should be included both the circular fibres around the neck of the bladder and those surrounding the first part of the urethra. The relative importance of the two sets, however, varies greatly in the two sexes—those of the urethra being much more important in the male than in the female, for whilst in males the water column producing an outflow is diminished to one-half after slitting up the urethra, in females the same operation only reduces the column one-fourth of its original amount.

THE REGISTRAR OF THE COLLEGE OF PHYSICIANS.

A WELL-MERITED acknowledgment of the valuable services which Dr. Pitman, in his capacity of Registrar, has rendered to the College of Physicians was made by the Fellows at the Comitia meeting held on the 18th inst. All who know anything of the College matters can testify to the self-devotion and the ability with which Dr. Pitman performs his duties, no less than the extreme courtesy which he exhibits towards those who are brought into official relation with him. The duties of Registrar have enormously increased of late years, and yet the honorarium has remained a really paltry sum. Upon the motion of Dr. Risdon Bennett, moved in very complimentary terms, and received with unanimous approval, the College voted Dr. Pitman 100 guineas for his immediate acceptance, and resolved that an addition of £50 a year should be made to his present inadequate honorarium. The compliment thus paid to Dr. Pitman is a thoroughly well-earned one.

GALLANTRY OF A MEDICAL OFFICER.

ALL the world over the English officer maintains his reputation for pluck. A young medical officer, who has not been above a year in the service, conducted himself right gallantly the other day in an attack made for the purposes of plunder upon Orange Walk, Honduras, by some Yeaiché Indians from Mexican territory. It would appear that on the morning of September 1st a detachment of 40 men of the 1st West India Regiment was surprised by a body of Indians numbering about 150. The soldiers retired within some wooden huts, to which the Indians, with the aid of fire-sticks, endeavoured to set fire. The officer in command of the detachment and the attached medical officer—Staff Assistant-Surgeon Edge—were what officers term "tubbing" at the time of the attack being made. Their bodies were therefore cool, and so it seems were their nerves; for they both rushed out to the aid of the detachment of black soldiers and rendered some very effective service. The officer, a Lieutenant Smith, was badly wounded, but with the assistance of the doctor he most manfully stuck to his command. Dr. Edge, it would seem, fresh from his tub, had to run a sort of gauntlet, revolver in hand. The soldiers succeeded in driving off the enemy, killing thirty of their number, including their leader. The detachment of the West India Regiment had one man killed, and thirteen wounded, and of the latter one soldier, shot through the abdomen, died on the following day. We understand that Assistant-Surgeon Edge had his house and everything belonging to him burnt by the Indians; but we hope he will not go without some reward.

THE LAY INSPECTORS.

WE are glad to perceive that our view of Mr. Stansfeld's recent appointment of lay inspectors to do the work of superior sanitary inspection created by the Public Health Act is beginning to force itself on the attention of other than medical men. The *Spectator*, in an article last week, which was admirable for its temperate and sensible tone, pointed out the unreasonable character of the assumption that parochial medical officers of health, obliged to struggle for their subsistence in private practice, could effectively perform the judicial function of superior health officers. Our contemporary fully endorses our prophecy that lay inspection of the doings of local health officers will only be conducted upon a routine system, and must necessarily end in the same stagnation, and consequent abuses, which were detected by THE LANCET Commissioners in the lay-inspected workhouse infirmaries in 1865.

The writer in the *Spectator* suggests what is quite possibly one of the true motives of Mr. Stansfeld's policy—viz., the comparative cheapness, in salaries, of the new unskilled assistant-inspectors; and no doubt the immediate expense of appointing a sufficient staff of medical men really competent to perform the duties of the higher inspection would have been larger than that which has been so far incurred. To those, however, who have at all acquainted themselves with the ruinous cost inflicted on the country by the unchecked ravages of epidemic diseases, it will be evident that even £10,000 or £12,000 a year expended in strengthening the central medical staff of the Local Government Board would be a mere trifle compared with the economy of rates and taxes that must ultimately be effected.

OPIUM-SMOKING.

READERS of "Edwin Drood" will remember the description of the opium-smoker as he is found at the East-end. The steady influx of the Chinese into that quarter has multiplied the victims to the vice and the houses in which they are accommodated. These latter are of a very low character, and are mostly kept by Chinese, to whose countrymen opium-smoking represents the indulgence which spirit-drinking does to the British seaman. The drug as it is inhaled is an aqueous extract made by first dissolving the crude opium in water, and steaming, then carefully boiling. Impurities, like the fragments of leaves, sticks, and so forth, are skimmed off, till it has the consistency and appearance of tar. The prepared opium represents about twice its own

weight of the crude. It is retailed to the smokers, who keep it in small boxes made of buffalo's-horn. The smoker puts some opium, about the size of a pea, into the bowl of his pipe, which is of earthenware, and having lighted it at an adjacent lamp, reclines on his side and inhales it in two or three whiffs, retaining it in his lungs as long as possible. So employed may be seen at any time, in certain houses in the neighbourhood of Ratcliffe-highway, scores of Chinese and Lascars, whose sallow, corpse-like complexions, bleared eyes, and relaxed look, indicate the effects of their indulgence. The amount these smokers consume is sometimes surprising. Many of them use a quarter of an ounce daily; some, it is said, as much as one ounce. They rapidly get decrepit in body and mind, and die in starvation and rags, nobody knows exactly how. For all this, the vice is greatly on the increase in China and among the Chinese settlers in every quarter of the globe.

THE NORTH SURREY SCHOOLS.

IT is refreshing to read the last report of the condition of these schools. The report was one drawn up by Dr. Carpenter, of Croydon, who accompanied a committee of guardians. One can scarcely imagine that it applies to schools in which two short months ago we found 104 out 766 in the infirmary with ophthalmia, scabies, eczema, and such-like diseases. There is a conspicuous absence of any account of the health of the children, or of the number of cases in the infirmary. But supposing the *couleur de rose* character of it to be justified by the actual facts, we can only congratulate ourselves on the great change produced so rapidly, and doubtless by attention to our suggestions. The following is the report:—

"We, the undersigned, have visited the North Surrey District School, and have been very pleased with the general management. We find the children, as far as we are able to judge, contented and happy. We examined the food, and considered it excellent. Obedience seemed to be inculcated, and cheerfully accorded. We think that the industrial department may be somewhat extended, and greater accommodation for industrial education in details gradually provided. We recommend that the saving (?) classes should have shorter hours for work. We also recommend a more perfect isolation of the ophthalmic cases from the healthy children, and that greater facilities for recreation in wet weather should be provided. We think the arrangements, as far as they at present exist, are fairly carried out, and that the school generally is in good order.—(Signed), Alfred Carpenter, M.D., William Hyslop, William Gibson, guardians; Thomas Smith, Alfred C. Ebbutt, visitors."

CONSUMPTION AND CANCER.

Is it true that consumption and cancer prevail in, and are similarly affected by, the same regions? According to Dr. Andrews, Professor in the Chicago Medical College, who has been classifying the pathological facts embodied in the United States Census reports of 1860 and 1870, the laws governing the prevalence of the two diseases are two:—First, consumption and cancer abound near the sea, and diminish as you recede from it; second, at equal distances from the sea they are most prevalent at the north, and diminish as you go south. Hence he concludes that the best resort for the phthisical or carcinomatous is some point which is, at the same time, as far south and as far from the sea as possible. New Mexico affords these conditions, the deaths from consumption in that territory being only 3 per cent., or Arkansas, where the deaths from the same disease are 5 per cent., while in New England, which is sea-girt and colder, they are 25 per cent. Entirely in accordance with this rule, but contrary to popular opinion, Minnesota is a less salubrious place than any other State. Dr. Andrews's views are, of course, local in their bearing. To make them of imperial application, a comparison between his census returns and those of other countries is necessary.

THE MIDLAND MEDICAL SOCIETY.

DR. RUSSELL REYNOLDS, F.R.S., has just received one of those ovations for which our brethren in the midland metropolis have earned a reputation. The Midland Medical Society, which on former occasions invited Dr. B. W. Richardson, F.R.S., and Dr. Lionel Beale, F.R.S., to deliver addresses to its Fellows and Members, this year, during the presidency of Mr. J. F. West, sent an invitation to Dr. Russell Reynolds. He chose for his subject the Application of Electricity to the Treatment of Nervous Diseases; and, under the direction of the new President, Professor Bassett, arrangements were made for a conversazione at the Great Western Hotel in Birmingham on the 16th inst. Nearly 200 attended. After the address, which was listened to with the closest attention, only interrupted by applause, seventy gentlemen invited to supper the learned lecturer and his able coadjutor, Dr. Gowers, who had demonstrated the various forms of apparatus and their application to the living subject. The assembly was broadly representative of the best talent of the Midlands, and we congratulate the Council, Fellows, and Members of the Midland Medical Society on the result of their liberal and enlightened administration.

OUR NEW SANITARY CORPS.

AMONG the items of Indian military news we gather that Captain Lockwood, who was aide-de-camp to the late Viceroy, has been compelled by ill-health to take two years' furlough. It is added that he is not to remain idle, but has been appointed to an inspectorship under the provisions of the new Public Health Act, with a tour of duty in Lancashire, Derbyshire, and parts of Yorkshire. The post is said to be worth about £600 per annum. Is it possible that these appointments are to be filled up after this fashion? Mr. Stansfeld has prepared us for believing a good deal, but that it is his intention to turn a military aide-de-camp on sick leave from India into a sanitary inspector, surpasses our credulity. Perhaps Mr. Stansfeld, despairing of carrying out any system of uniform sanitation, has determined, at any rate, to have his sanitary staff in uniform. An army surgeon on half-pay, *apropos* of this appointment, offers his services as an aide-de-camp to any general in want of one, and we are bound to say that he is much more likely to succeed in that post than the aide-de-camp can ever expect to do as an inspector under the new Health Act.

DANGEROUS DIETS.

THE failure of the potato crop is likely, from what we read, to bring about an epidemic of scurvy, unless the public can be better informed of the requirements of an antiscorbutic diet. The fact, therefore, cannot be too widely made known that pease-pudding, haricot beans, and boiled rice, which have been suggested in the journals as substitutes for potatoes, will not prevent the occurrence of scurvy. In the absence of the potato—an excellent antiscorbutic—fresh green vegetables or fruits will be requisite, or the health will certainly fail, even though fresh meat be taken. Amongst the vegetable material which may be used are the various forms of cabbage, lettuce, oranges, lemons, onions, mustard-and-cress, dandelion, and sorrel. The experience of the crews of vessels on long voyages has shown, over and over again, the uselessness of the pea and bean tribe in preventing scurvy.

"GASTRIC FEVER."

A FEW years back the College of Physicians appointed a select committee to compile a "Nomenclature of Diseases," with the object of "perfecting the statistical registration of diseases," &c. We have looked through this work with the hope of being able to enlighten ourselves as to "gastric fever," and we find that no such disease appears in its pages. Now, if by "gastric fever" is meant typhoid or enteric fever, it seems to us that it is the duty of the Local Government Board to send a *medical* inspector to make suitable investigations whenever a sudden outbreak (such as three or four persons dying in one house) occurs. If, again, by "gastric fever" is meant acute gastritis, then the certifying medical man is bound to indicate the cause of such gastritis, especially when several members of one family are attacked simultaneously. The return of "gastric fever," as a cause of death, ought most certainly not to be received by the authorities, seeing that there is no such disease recognised.

HOSPITAL SUNDAY IN NORWICH.

WE learn with great satisfaction that Hospital Sunday promises before long to be an accomplished fact in Norwich, thus adding one more to the many towns and cities where this valuable institution has been successfully established. It is most important that the county towns should take the lead; the county hospital or infirmary is generally in or near them, and it is a fair illustration of charity beginning at home. Moreover it forms a good centre to start with, from which may radiate mission Hospital Sundays in all other towns and villages whence patients are derived for the county hospital. We hear that there is to be a sort of optional Hospital Sunday in Norwich on Sunday, the 10th of November. We wish it every success, and trust that the good example set by Norwich may spread generally through the Eastern counties.

THE CORONER'S COURT AT READING.

JUDGING from the surgeon's report of the Reading Gaol, the local coroner takes an easy view of unaccountable deaths. According to the surgeon, a prisoner was brought from Newberry, a distance, we believe, of sixteen or eighteen miles, and died in sixteen hours. He was actually moribund when the surgeon saw him. Clearly it was due to everyone concerned to learn the cause of death. If it was of quite recent occurrence and not produced by violence, no one was to blame for removing this poor man within a few hours of his death. If it were not of recent occurrence, or if it were due to any harsh treatment during the journey, the truth should equally have been ascertained. The coroner would not sanction a post-mortem, though the surgeon said that without one he could not account for the death.

ALCOHOL IN HOSPITALS.

WE think Mr. Churchill was entirely right to protest, as he did in *The Times* the other day, against crude criticisms from outsiders as to the amount expended, in individual hospitals, on alcoholic stimulants. No useful judgment is in the slightest degree possible unless the critic is in a position to set forth fully the class of diseases that were under treatment in each hospital so judged. Moreover, Mr. Churchill is undoubtedly right in protesting against the custom of charging medical men who are acting in the exercise of their deliberate opinion with "eccentricities and extravagance." "Medical men," says Mr. Churchill very justly, "do not claim to be infallible, but they do claim to be the best judges of the potency of remedial agents."

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

DR. ROGERS issues a circular, which it is to be hoped will meet with prompt attention, requesting members who may have omitted to pay their subscriptions to send in their arrears now. There is no doubt that the Association has important work before it, in anticipation of the coming Parliamentary session; and it would be a great pity that lack of funds should cripple it. Dr. Rogers shows how important an increase in the expenditure on medical salaries in London has occurred within the last six years, and calls on his brethren to aid in extending the same benefit to provincial districts.

COTTAGE SYSTEM FOR THE INSANE.

THE problem of how to treat the insane loses none of its complexity by the proposed addition of cottage hospitals to the asylums. Bad as it is to have lunatics of every kind herded together—there being no worse companion for a lunatic than a lunatic—the cottage, or family system, has evils of its own quite as great. This objection is not theoretical merely. Dr. Kirkbride, of Philadelphia, bears testimony to the facility presented by the cottage system for evading supervision and for effecting escape; while the risks of accidents, such as fire and personal injury, are much enhanced. If detached buildings are to be used, then they should not be so remote from the main one as "not to be connected with it by a covered way, well lighted at all times, and comfortably warmed in winter."

CHOLERA AND DENGUE ITEMS.

AT Meerut 1300 persons have died from cholera and dengue, Lieut.-Col. Frith, R.A., and Major the Hon. W. Fraser, being the latest victims. Peshawur and Lucknow are now free from cholera. In Cashmere the number of cholera cases reported has been 5600, with 2900 deaths.

A SPECIAL committee of the Edinburgh Town Council, charged with the duty of reporting on a better organisation for performing the sanitary work of the city, have agreed to recommend the appointment of a Public Health Committee, to concern themselves with such matters as the supervision of burial-grounds, the state of lodging-houses or overcrowded dwellings, the prevention of nuisances arising from manufactures, the inspection of workshops, bakeries, stables, &c., the adulteration of food and the sale of diseased meat, and the prevention or mitigation of epidemic diseases.

WE have the gratification to announce that the outbreak of cholera in St. Petersburg had so far declined on the 28th September that after that date daily returns of the progress of the disease were no longer published. The outbreak commenced on the 23rd June, and from that date to the 27th September there had occurred 3413 attacks (2371 males and 1042 females): 1693 recoveries (1196 males and 497 females), and 1663 deaths (1141 males and 522 females).

ON the 15th inst. a medical *conversazione* was held in the West Riding Asylum at Wakefield. Professor Turner, of Edinburgh, delivered a lecture to a large and influential audience of local practitioners and men of science on the cerebral convolutions.

THE *Australian Medical Journal* rejoices at the overthrow of the Duffy Government, and hopes that the profession in the colony will never again be "so infamously treated as it has been by the administration which the country has so emphatically condemned."

THE preliminary meeting for the formation of the proposed Medical Microscopical Society will be held in the College Hall of St. Bartholomew's Hospital on Friday, the 1st of November, at 7 P.M. precisely. Mr. W. Morrant Baker, F.R.C.S., Warden of the College, has consented to take the chair. All qualified medical gentlemen and registered students interested in the movement are invited to attend.

AT a meeting of the Medical Society of Victoria held in June last, the following collection, taken from the stomach of a lunatic, upon whom a post-mortem examination had been made, was exhibited:—Twenty-five pebbles, sixteen pieces of glass, twelve nails, one screw, two bones, a button, five bits of tin, a peach-stone, six fragments of a pipe-stem, and a whole cutty pipe. The cutty pipe was found fixed in the ileo-cæcal valve.

A SEVERE catarrhal epidemic has broken out among horses in some parts of the United States and Canada. In New York 7000 horses are stricken with the disease, while in the province of Toronto three-fourths of the horses have been attacked.

THE Assembly of South Australia has passed a resolution in favour of making all medical practitioners public vaccinators, and awarding them three shillings and sixpence for each successful case.

AT the last half-yearly meeting of the Scottish Meteorological Society it was announced that the Marquis of Tweeddale had presented the Council with £100 for the prosecution of an inquiry into the properties of ozone.

THE Board of Trade are about to appoint a third medical inspector of emigrants at Liverpool. The salary is fixed at £300 a year, and testimonials &c. must be sent in on or before the 15th of December.

ACCORDING to the census of the German empire, which was taken in December last, the total population (including Alsace and Lorraine) amounts to 41,058,000. The females exceed the males in the empire by no less than 768,000.

THE *Builder* states that the drainage works at Ramsgate are being actively pushed forward, with the view of having the whole town sewered before the influx of visitors next year.

A PROJECT is on foot to utilise the sewage of Sheffield. The Town Manure Company have concluded a contract with the Town Council by which they have acquired the disposal of the sewage for twenty-one years.

THE freedom of the city of Bologna has been conferred upon Professor Virchow "on account of the eminent services he has rendered to science."

THE author of the "Origin of Species" will, it is said, be brought forward as a candidate for the post of Lord Rector of Aberdeen University at the next election.

UNDER the will of the late Sir David Baxter the University of Edinburgh becomes entitled to £40,000 for its further extension and endowment.

THE Emperor of Germany has conferred on Mrs. Alsager, who acted as nurse in the Saarbrück hospitals from Aug. 1870 till Jan. 1871, the Order of the Iron Cross.

TYPHOID FEVER is said to be very prevalent at Wexham, a village near Preston.

WE are glad to learn that efforts are being made to establish a skating "rink" in London for the coming winter.

ANOTHER large vessel has arrived in the Thames with five cases of scurvy on board.

REPORT
OF
The Lancet Sanitary Commission
ON
EMIGRANT SHIPS.

No. III.

Scales of diet, cooking, and serving arrangements.—Some preliminary remarks, that formed a sort of prologue to this inquiry, published in THE LANCET of the 5th inst., recapitulated the scale of diet drawn up and enforced by the Emigration Commissioners in accordance with the Passenger Amendment Act of 1855. The particulars of that scale need not be rewritten, because we shall describe *seriatim* the meals of a steerage passenger, and because, too, it is universally allowed that no limit as to quantity is made in any of these ships. We have, however, compared the scales of diet in use in the Royal Navy and in troop-ships with those of the Emigration Commissioners, not by any means to the disadvantage of the latter, although it is manifest that the scale requires revision. It is not, however, necessary to discuss that question; for it appears that in no single instance is the official list adhered to in its entirety.

There are from two to four steerage passenger cooks in each vessel, or an average of one to every 100 emigrants. The galleys of the vessels that we visited were in very fair order. The meat is stored in a large ice-house forward, as are also the vegetables and other fresh food, all of which is taken indifferently for the use of steerage and saloon passengers, though it is natural to suppose that the prime joints are sometimes chosen for the latter class. We inspected, however, three ice-houses, and found the quality of their contents, animal and vegetable, very good, though packed in a heterogeneous and unmethodical way, indicative of certain waste, and probable deterioration. All the biscuit examined, whether out of store or out of the hands of emigrants, was good, and the bread was as good, but not better than it should be. As to the latter article, it is sufficient to say that, having eaten it at the commencement and at the end of a voyage in one of these emigrant ships, as well as in mid-ocean, we believe that sourness is the exception rather than the rule. The butter taken at random from an emigrant's plate on the steerage table was as good as that furnished in the saloon; the potatoes were fairly good; and the soup in all cases was better in quality than we have seen served out to the inmates of any large "service" or other establishment ashore.

Now as to the *modus operandi* of meals in the steerage. At all meals, and we believe on all ships, an *ad libitum* scale obtains. Breakfast commences at 8 A.M., and consists of coffee, sugar, fresh rolls and butter, or oatmeal porridge and molasses. The coffee is brought from the galley in large tins, and is served out to all in turn by the steward and his assistants. We have tasted better and worse. At 8.20 A.M. we visited all the steerages, "grubbed about" among the people, tasted their provisions, and talked to several, including a good specimen of the sea-lawyer, who had "crossed" several times before. We went round at the dinner hour (one o'clock) on board two ships, and in both cases inspected the provisions before they were sent from the galley. The soup, as we have above indicated, was very good, and is indeed always a strong point in

nautical cookery. It was taken from the galley in large tin cans, and was sufficiently hot when it reached the steerage-deck. The meat was cut up in the galley, and sent down in large metal dishes. The carving was rough, and the result to a delicate appetite was not inviting; but the meat was sound, wholesome, and fairly cooked. One steward served it out to each passenger with a large fork, and another followed with potatoes. All had an opportunity of being helped again. Salted ling was given on Friday, in deference, as it is said, to the religious proclivities of Irish emigrants, this being, indeed, the only fish day of the week. We doubt very much the wisdom of this proceeding. It is difficult to cook fish properly in large quantities, and the result on board ship is not particularly successful. We did not, however, hear any complaints, except from the father of one family, who objected to the absence of animal food, and who was at once provided with a meat dinner by the purser. In all vessels pudding is given on Sundays, and in most, "mess" (i.e., salt) beef and pork occasionally, as Swedes, Norwegians, and Germans are said to prefer it to fresh meat. Supper is served at six o'clock, in the same fashion as at breakfast, and consists of tea, sugar, bread, and butter, with oatmeal for those who like it. Biscuit is always at hand, and the allowance of water, though fixed by the Government scale at three quarts per day for each person, is practically unlimited.

In summarising the above brief description we may at once say that the sort of machinery employed in serving out rations on board emigrant ships is very much the same as that in existence at most of our large public institutions. There is of course less order, but this is to a great extent necessitated by want of room, and by the absence of that discipline which as a matter of course obtains in all large establishments ashore. And, lastly, the sight or smell of food of any kind is, as we all know, excessively distasteful to a sea-sick stomach. There can be no doubt that the cooking is to a certain extent clumsy, in true accordance with the fashion of Britons whenever large quantities of food are prepared for consumption. But until a better system obtains under similar circumstances ashore, we can hardly expect much reformation afloat; and speaking from close personal observations, made during the various stages of tropical as well as Atlantic voyages, we can testify to the fact that three-fourths of the emigrants "take to their victuals" very kindly indeed, and eat abundantly, if not enormously. It must be recollected that these passengers are carried across the Atlantic in from ten to twelve days at the rate of about a halfpenny a mile, including provisions, and that last year 212,423 such passengers were landed at their respective destinations with a mortality of only ·06 per cent. A very cursory glance at the occupants of an emigrant ship when she is fairly out on the Atlantic will soon convince the observer that for the vast majority, the much-quoted "middle passage" has very few horrors.

DR. RICHARDSON'S RESEARCHES ON THE TRANSMISSION OF LIGHT THROUGH ANIMAL STRUCTURES.

A STATEMENT copied from the *San Francisco Scientific Press* is now going the round of the newspapers, to the effect that a method has recently been discovered in America, by which the internal organs of the body can be rendered visible. This statement requires to be corrected, in order that a true version of the known facts, on the subject referred to, may be presented to the public.

The report states that Dr. Richardson, two years ago, accidentally discovered, in conducting some electrical experiments, that the hand can be so illuminated by the electric light as to be rendered transparent, and that Dr. Thomas Nicholson, of New Orleans, pursuing the inquiry further, has, by aid of the calcium light, shown it possible to bring the internal organs of the body into view for diagnostic purposes. The facts really are, that Dr. Richardson's experimental observations were in no way accidental, neither were they confined to the application of the electric light. On the contrary, they were parts of a long, laborious, and systematic research conducted five years ago, and reported to the British Association for the Advancement of Science at its meeting at Norwich in 1868. In his researches Dr. Richardson employed, in various ways, the electric light, the magnesium light, and the calcium light; and at Norwich, where he explained the relative values of these different illuminating agencies, the instrument he exhibited was worked with the magnesium light. His inquiries included the study of the effects of light on portions of the dead body, on bone, muscle, blood, membrane, and parts of visceral organs; while they also included attempts to make visible the internal structures of certain regions of the living body—viz., the hand and foot, the structures forming the cheeks, the neck, the chest, and the abdomen. Since that time the same investigator has pursued the inquiry, thus independently originated, and has a few times successfully applied the process in diagnosis.

As a summary of what has yet been ascertained, we may state that the absorption of light by the blood, and the general diffusion of blood through the living organism, seriously and immediately limit success, even in parts most diaphanous. In structures the least dense, the pulsations of the arterial vessels—i.e., the motions of pulsation—may be seen, though the vessels themselves are not rendered distinct; nerves are not defined, and bony structures are but obscurely outlined. In an extremely emaciated young subject, when the magnesium light was, with a suitable apparatus, directed upon the thorax laterally, on the left side, the form of the heart was faintly discernible, but the alternate motions of the auricles and ventricles could not be distinguished. The presence of cysts containing fluids, of accumulations of fluids in serous cavities, and of well-defined dense internal tumours, might, Dr. Richardson thought, be detected in cases favourable for this mode of examination, and in the diagnosis of some obscure forms of hernia the method might possibly be applied with advantage.

Some observations have been made by the same inquirer, on the transmission of light through some of the inferior animals, such as the frog, the chick, and the carp.

The difficulties that have stood in the way of a satisfactory practical application of this intended advance in medical science and art are very numerous. We have pointed out certain of these, but there are others connected with the working of the instruments required, and with the absorption of heat, all of which difficulties have yet to be overcome. These have prevented Dr. Richardson publishing the results of his labours since 1868, his wish being to present a method so complete and practical that all medical men may at once avail themselves of it for diagnosis. The recent announcement from the other side of the Atlantic may, perhaps, lead him to bring before the profession his later efforts towards the perfection of a process which may, one day in the future, form a subject of considerable historical interest in the annals of medicine.

THE SCHEME FOR A CONJOINT EXAMINING BOARD.

(From a Correspondent.)

WERE it possible that such an arrangement for an Examining Board could succeed, the Committee lately appointed for the formation of such a board ought to be successful, not only on account of the reputation and experience of those elected by the different medical authorities, but on account of the comprehensive representation these gentlemen exhibit.

The Committee is composed of the following:—Drs. Paget and Humphry, appointed by the University of Cambridge; Drs. Acland and Rolleston, by the University of Oxford; Drs. Philipson and Heath, by the University of Durham; Drs. Barclay, Bennett, Pitman, and West, by the College of Physicians; Sirs William Fergusson and James Paget, and Messrs. Busk and Quain, by the College of Surgeons.

These fourteen gentlemen are also connected thus with

the following medical authorities: five — viz., Barclay, Humphry, Paget (George), Pitman, and Philipson, graduates of Cambridge; two — viz., Acland and Rolleston, graduates of Oxford; two — viz., Bennett and Barclay, graduates of Edinburgh; two—viz., Heath, graduate, and Paget (James), on the Senate, of the University of London. Eight of the College of Physicians—viz., Acland, Barclay, Bennett, Paget, Philipson, Pitman, Rolleston, and West; seven of the College of Surgeons—viz., Busk, Fergusson, Heath, Humphry, Paget, Philipson, and Quain. One of the College of Surgeons of Edinburgh—viz., Fergusson. Two of the Society of Apothecaries—viz., Humphry and Philipson. And five of the General Medical Council—viz., Paget (President), Acland, Bennett, Humphry, and Quain.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION, IRELAND.

AT a meeting of the medical officers of the Abbeyleix Union, held on the 17th of October, 1872 (Dr. Swan in the chair), it was proposed by Dr. Hanrahan, and seconded by Dr. Fitzpatrick: "That we give our full adhesion to the rules and regulations of the Poor-Law Medical Officers' Association of Ireland; that we approve of the project of having a meeting in Dublin of the county representatives of this Association, for the purpose of submitting a report to Sir Dominic Corrigan, the other members of city, county, and University of Dublin, and as many other M.P.s as may attend, with the view of having our grievances brought under the notice of Parliament next session; that we will endeavour to secure the co-operation of our own county and borough members for the same object."

Dr. Strong proposed, and Dr. O'Kelly seconded: "That our present salaries being inadequate to meet the increased rate of living, we trust that the friendly disposition evinced by the guardians in removing our legitimate grievances on former occasions will be manifested now by so increasing our salaries as to enable us to maintain the position befitting our profession; we respectfully submit that, owing to the additional expenditure incurred now, a salary of a hundred and twenty pounds a year would not leave us in as good a position as when we were originally appointed at eighty pounds."

Correspondence.

"Audi alteram partem."

PROFESSIONAL SUICIDE.

To the Editor of THE LANCET.

SIR,—The tendency of medical men to commit "professional suicide" seems to increase. How is it that medical men, who pay such heavy fees for study and qualification, who work so hard by night as well as by day, are content to be the first sent for, and the last paid—aye, more than that, are content even to work for nothing? In the Church they don't do it; in the Law they most certainly don't do it.

Medical men are continually cutting their own throats, and their fellow practitioners' throats too, for they seem eagerly to lay themselves open to administer the gifts of others free of cost; indeed, by administering such charities they deprive themselves and others constantly of the just rewards for their labour. They positively help to educate the public generally in the habit of expecting to get medical advice for nothing, and to encourage all classes in not making a provision to pay the doctor.

In every other occupation a man can live by his work, and men are found able to retire, and also to leave handsome provisions behind them for their wives and families; but alas! how frequently do we see a clever and industrious medical man slaving at his work for years, keeping up appearances with carriage, horses, and an expensive house, then dying and leaving those dearest to him either dependent upon the charity of relatives or of some institution.

One evil practice which tends to such results is the pernicious habit of writing prescriptions. Physicians and prescribing surgeons are their own enemies and also the enemies of their fellow-practitioners of all grades, and of their wives and families. They act most unfairly towards the whole craft. The enemies are *within* the circle; they rob their educated brethren, and make the fortunes of the chemists. The patients are thrown into direct contact with chemists, who are not at all backward in asking questions of them respecting their ailments, and criticising the treatment prescribed, and suggesting "little alterations" from time to time; and not only is this done, but by "counter-practice" they manage to appropriate the few odd shillings, and *more*, that may be available for a short time, and then, when the money fails to come in, they *recommend* their patrons to go to the hospitals or dispensaries, where there is to be found an educated medical man who has been defrauded of his just gains, and now gives away his work and time to those who can find money for the cabs to convey them to his public consulting-room, money to pay butchers and bakers for their food, and who are obliged to come to him there because they have been so brought down in life through "law expenses" which they were obliged to provide for, and, indeed, because they have "lost everything!" Such are tales told frequently. When they are "going out of town" for change, they will ask, "If you would kindly give me the prescription for the last medicine, I could then get it made up!" Where? At our friend the chemist's, of course, who would again get his odd shillings for the same. Chemists know when "epidemics of bronchitis" are coming, and inform medical men of the same! "How do you know that?" said a medical man once to such an one. "Oh, I have had several people in the last few days; they always come to us before they go to you!" The constant dropping of water wears away the stone, and so will the constant abuse of the method of prescribing and dispensing, now so much in vogue, wear away "the profession." It won't be worth going into very soon! All the heavy work, and bad debts, and no pay, represent the lion's share of the qualified medical man; the small and sometimes large profits and quick returns represent the share of the unqualified. The only true remedy for the evil is to cut short the method of giving prescriptions to the public. They should only be consulted about between medical men, and any medical man taking sole charge of a case ought himself to supply the medicines. If he does not like to do so, let him act in conjunction with a junior (as at the law), who would be willing to act in professional conjunction with him. The expense to the patient would be no more, and the legitimate reward of labour, invested capital, and time, would flow into the proper channel. The preservation of the profession lies in its severance from the chemist.

With regard to those who administer the charity of others at the hospitals, they, like those who administer the law, ought to be highly paid out of the funds of the charity which they administer on behalf of the donors, and ought to be so paid as to be independent of practice altogether, just as our various orders of judges and stipendiary magistrates are.

If in medicine medical men would combine to work out a few parallels as they exist in the legal world, they would all find their advantage in doing so much more than in reforming Medical Acts made against themselves and in favour of the quacks, and in increasing the amount of work to be done previously to entering upon the privileged occupation of administering others' charity for nothing! If the Commissioner in charge of *inquirendo de lunatico* were abroad now he would certainly find a good many fit subjects for a "billet for the moon," amongst those who go to war with disease and death at "their own cost." A little wholesome and vigorous combination amongst medical practitioners of all grades would quickly alter the present ruinous aspect of medical practice. Two grand home truths are forgotten in the medical world—"Charity begins at home," and "the labourer is worthy of his hire."

Why, in the name of common sense, should there be less dignity in supplying medicines in the exact quantity and in the best quality required in the case, combining diagnosis with the application of the materia medica on the part of the physician, than in the bringing instruments and

using them on the part of the surgeon?—the instrument is the means of applying the knowledge in the one case, and medicine is the means of applying the knowledge in the other case. There has been, during some few years past, more nonsense than sense talked out upon this subject, and pride has had to bear the pinch.

Yours truly,

A PHYSICIAN RETIRING FROM MEDICINE, BUT NOT ON IT.

October, 1872.

THE CORONER'S COURT.

To the Editor of THE LANCET.

SIR,—Many issues of the greatest importance to the profession and the public are involved in any forthcoming legislation respecting the Coroner's Court. It is much to be desired, therefore, that the subject should be carefully considered in connexion with the Bill for the better registration of births and deaths which passed the House of Lords last session, but has yet to go through the House of Commons. The present time is a good one, as the public attention is now being drawn again strongly and painfully to the subject of secret poisoning, and the question is brought forcibly home to us, Can nothing be done to prevent the possibility of so many suspicious deaths escaping inquiry? As you have shown, the Coroner's Court, strictly confined to its legitimate functions—viz., to ascertain the cause of death,—is of the utmost value, always provided that the inquiry be so conducted as to fully reveal that cause beyond any question of doubt; and, this done, that all questions of legal responsibility be left for another and more suitable tribunal to settle.

I would suggest that all the lecturers on Forensic Medicine and Toxicology in all the metropolitan and provincial schools of medicine should meet and discuss the matter, sending copies of resolutions and suggestions to the Lord Chancellor, the Home Secretary, the President of the Local Government Board, and others concerned.

The following are the points which, as it seems to me, deserve attention:—

1. Greater uniformity throughout the kingdoms in the mode of registering deaths. Under no circumstances whatever should any death be registered without a medical certificate or coroner's information.

2. Some definite rule should be laid down to regulate the giving of medical certificates, and should there be any doubt as to the cause of death the case should be referred to the coroner by the medical attendant himself, and not through the police.

3. The medical practitioner last in attendance during life, or who has been called in after death, should be required to attend, as now, to give evidence as to symptoms during life or appearances after death. But the post-mortem examination should be conducted by a skilled pathologist, who should draw up a written report of all appearances, external and internal, such as is now done in Scotland, Prussia, France, and other countries. These reports would be more precise, more orderly, and much more satisfactory, even for the purpose of the inquest than the present loose system, while these accumulated records of pathological anatomy would prove hereafter of the greatest value and interest. The present reckless waste of scientific material in the Coroner's Court is simply deplorable.

4. The chemical analysis of the stomach should not be regarded, as it too often is now, as a bugbear to be avoided at any risk, but as part of the inquiry, and should be performed much more frequently than at present. A very moderate annual salary would enable the coroner to have the services of a skilled analyst, to be referred to in all doubtful cases; indeed, it might very reasonably be made one of the duties of public analysts.

5. A return should be demanded of all items of expenditure in connexion with the Coroner's Court throughout England, Ireland, and of the Procurators-Fiscal of Scotland, showing the salaries of the coroners, the amount of medical witnesses' fees, and the other expenses, such as ordinary witnesses, hire of rooms, mileage, &c. This inquiry should also elucidate the various modes of procedure (*a*) as to informing the coroner; (*b*) as to summoning jury and witnesses; (*c*) as to the exercise of discretionary power.

Much more might be said, but I must not trespass further on your space. I do hope, however, that this most important subject will be considered now without delay, and that certain wise reforms will be adopted so as to make the Coroner's Court a really useful and scientific institution, justifying its continuation, though (as I am sure could be done) at a much less cost and with increased efficiency. And I trust that the study of medical jurisprudence will be properly cultivated by professors and students, and not be regarded as a mere stepping-stone to another and a better chair by the former; or as a useless or weary part of the curriculum by the latter.

I am, Sir, yours, &c.,

October 14th, 1872. MODERN PROGRESS.

POOR-LAW MEDICAL OFFICERS IN IRELAND.

To the Editor of THE LANCET.

SIR,—It is proposed to hold a meeting of the county representatives of the Irish Poor-Law Medical Officers' Association some time before the commencement of the next session of Parliament, in order to submit a detailed report of the grievances of the service to the President, Sir Dominic Corrigan, and such other Members of Parliament as may be present, and to consider what may be the best means to adopt for their redress.

The question of permissive superannuation under the 32nd & 33rd Vict., cap. 50, will form a subject for discussion, and it would be very important for us to know in how many instances it has been refused. On referring to the last Report of the Poor-Law Commissioners, I find that but thirty-two medical officers have been superannuated since the passing of the Act in August, 1869. Of these twelve, or more than a third, got less than two-thirds of their salaries—the amount provided for by the Act. I am aware that there are many instances in which the superannuation has been refused. I should feel much obliged if the readers of your journal would let me know the name of any gentleman to whom, and if possible the circumstances under which, superannuation has been refused, in order that the report may be complete on this point, which is a very important one.

I am not aware that the provision of the "Union Officers' (Ireland) Superannuation Act," 35th and 36th Vict., cap. 89, has yet been availed of by any dispensary medical officer, as it has only existed since the 10th August last, but if such has taken place, it would be important that the fact should be communicated to me without delay.

As some controversy exists about the history of the passing of the latter Act, I may mention that we are solely indebted for it to the exertions of Sir Dominic Corrigan, and that its true history will be found in the last Report of the Irish Poor-Law Medical Officers' Association, dated 3rd June, 1872, and which is long since in the hands of every Poor-law medical officer in Ireland.

I am, Sir, your obedient servant,

JOHN MAUNSELL,
Sec. Poor-Law Med. Officers' Association, Ireland.

Harrington-terrace, Dublin, Oct. 1872.

LIVERPOOL.

(From our own Correspondent.)

VERY earnest efforts have been made for a long time by the authorities of the medical school to obtain sufficient funds to complete the new school-buildings, designed some twelve months ago, which still remain unfinished. Their appeal is kept constantly before the public in the local papers. In the introductory address at the commencement of this session, Mr. Banks adopted the unusual course of making it the medium of a stirring appeal to the merchants and leading men of Liverpool. Considering the usual style of these addresses, a little departure from the beaten track was pleasant. He certainly had a very strong fact to bring into prominent notice—that the second town in the king-

dom has hitherto been provided with a medical school which, for its insignificance as compared with most of the other provincial schools, it may well blush to own. There is a well-understood reason why in times past the Liverpool Medical School has not greatly risen in importance. It is this: Liverpool is not a scientific town; it has a few learned societies, but anyone who has been in the habit of frequenting their meetings would soon discover that science, even with its most devoted adherents here, is not the study or pursuit of the life; it is the mere plaything and recreation of the evening or the hour when business cannot be attended to. Of course the great and diversified experience many of our foremost practitioners obtain suffices to give them a position in the town and neighbourhood, but it does not constitute them successful founders of a school of medicine, or workers striking out new paths of research, such as we find in the Edinburgh, London, and Glasgow schools, whose name and fame attract students from a distance to their classes.

The first meeting of the Liverpool Medical Society for 1872-73 was held last Thursday, and it took the form of a conversazione, to which the President and Council invited the medical men of the town and neighbourhood who were not members. To render it as attractive as possible, the entire suite of rooms were filled with objects of medical interest. In one room was a display of anatomical and pathological specimens; in another surgical appliances and instruments; new drugs and pharmaceutical preparations in a third; whilst the display of microscopes was large, and many very beautiful specimens were shown under them. The President, Dr. Cameron, delivered a very interesting address on Health and Disease, which elicited warm applause. Upwards of 130 medical men were present.

October 23rd, 1872.

PARIS.

(From our own Correspondent.)

A FEW words to begin with touching the continuation of M. Davaine's experiments on septicæmia, an account of which I gave in my last two letters. I mentioned that M. Bouley, veterinary surgeon at Alfort, had announced at the Academy that he was carrying on various experiments with the object of verifying M. Davaine's results on the smaller animals, and of applying them to the larger ones. On Tuesday last M. Bouley made known to the Academy the facts which had resulted from his various inoculations. The blood which he employed for his experiments was taken from four rabbits inoculated by M. Davaine himself. The most important of M. Bouley's announcements was, that septicæmic inoculation was free from danger in man. This had come out accidentally. An assistant of his had pricked his finger with the capillary syringe with which he was about to inoculate a horse. The liquid contained one drop of a thousandth dilution of septicæmic blood; and, though his assistant courageously refused to take any remedy, no inconvenient results ensued. Furthermore, ten to fifteen drops of the same blood injected into the jugular vein had no effect in two horses. A like quantity injected under the cellular tissue of the same horses also proved harmless. Five dogs inoculated with the same blood were quite unaffected. They instinctively refused to eat of the flesh of the poisoned rabbits which had served for the experiments. Besides relating his own experiments, M. Bouley referred to another series of inoculations carried on by M. Tillaux, at the amphitheatre of the hospitals, in which the introduction of putrefied blood had proved harmless, not only in six dogs, but even in several rabbits. M. Bouley ended by saying that the facts pointed to two conclusions: the increasing and terrific virulence of septicæmic blood, as mentioned by M. Davaine, did not apply to man and the larger animals; and, secondly, even on limiting it to the guinea-pig and rabbit, it had not the destructive power which had been supposed.

In the discussion which followed M. Davaine vindicated the value of his experiments by saying that he thought those of M. Bouley with the larger animals were not numerous and conclusive enough. As to the rabbits which were unaffected, the experiment must have been badly performed, or the septicæmic blood too new, as in rabbits inoculation always proved fatal. M. Colin of Alfort recorded experiments of his in which horses and all the carnivora were unaffected by septicæmia, and in which rats and mice resisted the effects of blood which had poisoned rabbits and guinea-pigs.

Whilst at the Academy of Medicine, I may mention that M. Chauffard, in the same sitting of Tuesday last, made some very valuable remarks on the Etiology of Exanthematic Typhus. M. Chauffard said that, seeing that overcrowding, want of food, and moral and physical misery generally were yet considered to be the causes of typhus, it was very surprising that the disease did not make its appearance at Paris and Metz. On the other hand, the German army around Metz had suffered cruelly from the epidemic. M. Chauffard could not help thinking that there was a special action of soil and race in the production of the malady, just as with cholera, yellow fever, &c. He recalled that it was on their return from foreign climes that the French armies were attacked by typhus in 1814. The same fact occurred in the Crimea, during the war; and the troops on their return to France immediately got rid of the epidemic. M. Chauffard added that the disease, which was endemic in Russia and Mexico, found its way by importation and transmission into the French prisons and bagnes.

M. Babinet, the celebrated savant, died yesterday, at the age of seventy-eight, from chronic disease of the digestive organs. He was a lively, talented, original man, quite popular here, and whose name was frequently mentioned in the *Figaro*, *Gaulois*, and other similar papers, on account of his strange manners and theories. He was a member of the Academy of Sciences, of the Astronomical Observatory, and had published several writings of great value on various questions of science, astronomy, aerial navigation, medicine connected with hygiene, public health, &c. Furthermore he was an able lecturer, or *conférencier*. But he was especially popular on account of his articles on familiar science, published in the daily press. He was very obstinate in his hobbies; one of them was that the Transatlantic cable would be an entire failure—that for scientific reasons it was completely impossible, unfeasible. His apartment was a perfect den or labyrinth, covered with huge mountains of papers, journals, manuscripts, through which it was necessary to wind one's way before reaching their possessor.

The health of Paris is better at present than could be expected with the damp rainy weather we have had for the last fortnight. The mortality last week was only about 750—below the mean figure. Of course diseases of the chest predominate. There are no signs of any epidemic.

There was an extraordinary meeting of the Committee of Hygiene of Paris yesterday at the Luxembourg, under the presidency of M. Léon Say. The object of the meeting was to consider the best means for disinfecting a quarter of the town, the Quartier St. Martin, which is much in want of it. As there are several questions connected with the drainage of the streets into the canal, it is likely that the committee will have to meet again before any determination is taken.

One of the journals here announces that the Prince of Asturias, the son of the ex-Queen of Spain, Isabella, has not been able to go to Vienna to resume his studies, as it was considered necessary to revaccinate him previously, as small-pox is now prevalent in Vienna. The operation was performed by the Marquis de San Gregorio, the Queen's physician, and 700 francs were given to the mother of the child from whom the vaccine was taken. No mention is made of the doctor's honorarium.

I have to communicate the death of Theophile Gautier, the well-known poet, novelist, and art-critic, who has written so many enchanting works of fiction, and described in such vivid and picturesque style his travels in Spain, Russia, and the East. He suffered from a disease of the heart, attended by dropsy. The milk-diet treatment had been very successful for a short time in removing the dropsy, and therefore afforded great relief, but the swelling soon returned with its distressing symptoms.

Professor Vulpian has been officially installed in the chair left vacant by the departure of Brown-Séquard.

St. Louis Hospital is being much enlarged, as it is quite unequal to the wants of the populous quarter amidst which it stands. An entire pavilion, devoted to surgical wards, will be shortly added to the main building.

Paris, Oct. 22nd, 1872.

NEW YORK.

(From our own Correspondent.)

CEREBRO-SPINAL FEVER.

THE history of cerebro-spinal fever, as it has prevailed at New York during the present year, should be preceded by a brief note of the same disease as it appeared in the horse. This epizootic first appeared among the horses of the railroad stables of the city, as early as May, 1871, and prevailed with varying intensity throughout the year. The disease presented many of the special symptoms observed in man, and the pathological appearances were equally characteristic. It attacked about 10 per cent. of the stock, and proved fatal in about the same ratio of animals affected. Before this epizootic had subsided, cases of cerebro-spinal or "spotted" fever began to be reported to the Health Department. Previous to this date occasional cases had been reported. In 1866, 18 deaths were recorded; in 1868, 34 deaths; in 1869, 42 deaths; in 1870, 32 deaths; and in 1871, 48 deaths. The first recognised cases in 1872 were reported on the 6th of January. During the first six months of 1872, 790 cases were reported, and 607 deaths. From that period it began to decline, and at the close of the third quarter (September 30th) but occasional cases were reported. The largest number of deaths was recorded in May—viz, 199; in April the deaths were 171, and in June 158; in July 70 deaths occurred. An analysis of the cases of deaths which were recorded from January 1st to May 31st (469) gives the following results: Males 247, females 222; under five years of age 109 males, 107 females, total 216; between five and ten years, 99; between ten and fifteen years, 49; between fifteen and twenty years, 29; between twenty and twenty-five years, 25; between twenty-five and thirty years, 14. It is quite impossible, from our data, to correctly estimate the ratio of mortality, as the latest number of cases is unknown. The only approach to an estimate is found in the records of the Health Department. These records furnish a very imperfect statement of the number of cases, and a very accurate account of the number of deaths. They are as follows:—Total cases reported from January 1st to June 30th, 790; total deaths in same period, 607—upwards of 76 per cent. The disease prevailed principally among the poorest classes and in the most defective dwellings. There was no evidence that it was contagious, or communicated from person to person. The same is true of the epizootic. The treatment was various. The best qualified veterinary surgeon employed aconite in large doses as a preventive, and in the early stages of the disease, as curative agents, opium and bromide of potassium were mainly relied upon.

New York, Oct. 1st, 1872.

ENTRIES AT THE MEDICAL SCHOOLS.

THE completion of the registration at the College of Surgeons furnishes the following return of the entries at the several metropolitan medical schools:—University College, 83; Guy's, 83; St. Bartholomew's, 79; St. Thomas's, 51; St. George's, 47; King's College, 35; London, 31; Middlesex, 22; St. Mary's, 21; Charing-cross, 20; Westminster, 5. Total 477.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were duly admitted Licentiates of the College on the 18th inst.:—

Bacot, W. G., Blandford.
Brown, J. L. O., Richmond House, St. George's-road, Southwark.
Charlesworth, J., Hanley.
Clapham, W. C. S., Powis-place, Great Ormond-street.
Elliot, N. B., Denmark-hill, Camberwell.
Finzi, J. M., Gower-street.
Hands, A., Inkberrow, Redditch.
Lineker, E. H., Widnes, Warrington.
Lubbock, M., Guy's Hospital.
Parker, G. W., Selby Villas, Newcross-road.
Pellereau, G. E., Bedford-place, Russell-square.
Sheppard, T. W., Oxford-gardens, Notting-hill.
Stern, M., Maddox-street.
Wood, E., Bromsgrove.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members were admitted Fellows of the College by election at a meeting of the Council on Oct. 17th:—

Cumming, Arthur James, Exeter; diploma of membership dated April, 1842.
Stacy, Edward, Epsom; January, 1830.
Thom, William, Bombay Army; November, 1839.
Welsh, Francis Fawcett, Saffron Walden, Essex; May, 1840.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 17th:—

Brodribb, Francis Benjamin, Wells-street, Hackney.
Fletcher, George, Bromsgrove, Worcestershire.
Humphreys, Henry, Amhurst-road, Hackney.

As Assistant in Compounding and Dispensing Medicines:—

Davies, Peter Hughes, March, Cambridgeshire.

QUEEN'S UNIVERSITY IN IRELAND.—The following gentlemen obtained the diploma in Midwifery at the late examinations:—

John George Adamson, Samuel Agnew, Philip Lambert Benson, John Bryans, J. M'Mahon Browne, Moses Black, Robert Evans Burges, N. Whistler Colahan, John G. Collis, Timothy Crowly, Richard Davis, Hugh Alexander Davis, Henry A. Fogarty, James Graham, Francis Healy, John James Holland, James Hurley, J. Knox Houston, William E. Johnston, George Johnstone, J. King Kerr, John Knox, Chas. Albert Macaulay, Robert M'Bride, Samuel M'Cutcheon, Denis P. Macdonald, Samuel M'Kee, Henry J. Madders, John A. Malcomson, Wm. Augustus Maybury, Horace Mansell Maybury, W. E. Boswell Moynan, Bernard O'Connor, Patrick O'Connell, Simeon Holgate Owen, Thomas Patterson, James Ring, J. Moore J. Scott, Ebenezer E. Sloane, John Strahan, William Thomson, Alexander Young.

The first examination in Medicine has been passed by the undermentioned:—

James Moran (Second Class), William Savage Speer (Third Class), John Baird, George Barkley, R. C. Burke, Martin F. Cleary, Edw. P. Collis, Ludlow Colthurst, Charles Cooper, John Crampton, William Cranston, Maurice Cremen, M. Curtin, Jas. Crofts, Maurice Daly, Francis Davison, Alexander Dempsey, William Davis, George Dougan, William Faulkner, Samuel Fergus, J. Flood, J. Foss, William Graham, Patrick Gorham, George Gowland, James Gray, John Greany, Frederick Gresham, Henry Grier, Christopher Gunn, James Guthrie, John Hamill, Edmund Hemsted, Edwin Hemsted, Joseph Henry, Jonas Howe, Wm. R. Huggard, Benjamin Jagoe, William Jeffries, Henry Johnson, Edward Keely, J. Kennedy, Wm. Le Grand, Thomas Loane, P. Loughran, Henry M'Clure, Chas. M'Cartie, Patrick M'Donnell, William M'Iver, Thos. M'Loughlin, Horace Maybury, William Milward, Timothy Mullane, Jeriath Mullen, Michael Munro, John O'Callaghan, Timothy O'Meara, Simeon Holgate Owen, Joseph Parker, Charles Pinner, Norman Pollock, Caleb Powell, Richard Quinton, Henry Rathborne, Michael Ronan, D. J. Ross, James Ross, Charles Sharpe, Edward Shipsey, Edward Smyth, Michael Sweetman, David Thompson, William Tivy, Chas. Wadsworth, Wm. Warren, William Whitla, Michael White.

THE foot-and-mouth disease is increasing at a most alarming rate in Dorset.

ADDITIONAL accommodation for 400 lunatics will shortly be provided at Wandsworth and Brookwood Asylums, Surrey, at a cost to the county of £73,000.

THE number of paupers relieved in England and Wales at the end of July last was 10·6 per cent. less than at the corresponding period of the year 1871.

DURING the last nine months, the quantity of tobacco, raw and manufactured, imported into this country, exceeded in value £2,000,000.

THE Metropolitan Convalescent Institution has received £1000 from "R. G. F." Mrs. Gladstone's Free Convalescent Home for the Poor, Woodford Hall, has received a fourth £1000 from "N. P. T." Lord Muncaster, M.P., has given £500 to the Royal Albert Asylum for Idiots, Lancaster.

HOSPITAL SUNDAY.—On October 13th, collections were made at Victoria-park Congregational Church on behalf of the London Hospital, Victoria-park Hospital, Queen Adelaide's Dispensary, and the Children's Hospital, Hackney-road. The sum of £50 6s. was collected.

KING'S COLLEGE MEDICAL SOCIETY.—The annual inaugural meeting of this Society was held on Thursday, October 17th, when the opening address was delivered by W. B. Whitmore, Esq., M.B., the speaker especially treating of the relation of science to medicine. There was an unusually large attendance, including Dr. Barry (principal of the college), R. Cheere, Esq. (member of the council), and several of the professors and staff.

AT the twenty-ninth annual meeting of the Glasgow Southern Medical Society, held on the 3rd inst., the following gentlemen were elected office-bearers for the session 1872-3:—President, R. W. Forrest, M.D.; vice-president, James Dunlop, M.D.; treasurer, Edward M'Millan, Esq., surgeon; secretary, John Dougall, M.D.; seal-keeper, E. Duncan, M.D.; court-medical, John White, M.D. (convener), A. L. Kelly, M.D., John Aitken, M.D. (Govan), H. R. Howatt, M.D.

THE ALICE HOSPITAL.—His Majesty the Emperor of Germany has been pleased to confer the order of the Prussian Crown of the third class on Dr. Mayo, Fellow of New College, Oxford, formerly staff surgeon-major and director of the Alice Hospital at Darmstadt, and the same order of the fourth class upon Mr. J. C. Galton, M.A., formerly staff surgeon in the same hospital, who are also, together with Mr. H. Rundle, formerly staff surgeon, Dr. H. W. Page, Dr. R. Cory, Dr. W. E. Buck, Mr. H. E. Jackson, and Mr. W. E. B. Atthill, all former members of the staff of the hospital, to receive the war medal for non-combatants. The five first-named have, moreover, received the Hessian Cross for medical service (sanitätskreuz), and Dr. Mayo, in addition, the Hessian order of Philip the Generous, and the Bavarian Cross of Merit.

Medical Appointments.

ARCHER, R. S., M.B., C.M., has been appointed House-Surgeon to the Weston-super-Mare Hospital and Dispensary, vice Carter, resigned.

BROCKWELL, T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Ast District of the Eastry Union, Kent, vice F. S. La Trobe, M.R.C.S.E., resigned.

CREERY, A., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Dunglow Dispensary District of the Glenties Union, Co. Donegal, vice J. Widdup, L.R.C.S.I., L.M., resigned.

DEANS, J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Coleridge District of the Crediton Union, Devon, vice W. Densham, M.R.C.S.E., deceased.

ERICHSEN, J. E., F.R.C.S.E., has been appointed a Consulting Surgeon to the Hospital for Women and Children, Vincent-square, Westminster.

FLETCHER, R. V., L.R.C.P.Ed., L.R.C.S.Ed., L.R.C.S.I., has been appointed Resident Medical Superintendent of the District Lunatic Asylum, Waterford, vice F. X. F. Mac Cabe, L.K.Q.C.P.I., M.R.C.S.E., appointed Governor and Resident Physician of the Central Criminal Lunatic Asylum, Dundrum.

GARDNER, S. C. T., M.R.C.S.E., has been appointed Medical Officer for the St. Peter District of St. Mary, Islington, vice Frederick O'Conor, M.D., L.F.P. & S. Glas., L.M., deceased.

HAMILTON, A. P., M.D., M.R.C.S.E., has been appointed Medical Officer to the Loyal Bourne Lodge of Odd Fellows, Bournemouth, vice T. G. Horder, M.R.C.S.E., appointed Medical Officer to the London Lead Company, Alston.

HARPER, C., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 5 or Batheaston District of the Bath Union, vice W. A. Cox, M.R.C.S.E., resigned.

HARPER, J., L.R.C.P.L., M.R.C.S.E., has been appointed a Surgeon to the Barnstaple and North Devon Dispensary, vice C. Johnston, M.R.C.S.E., deceased.

HARTLEY, J., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for District No. 1 of the Beverley Union, vice C. Brereton, L.R.C.S.Ed., resigned.

HUNTER, C., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the newly formed Doochary Dispensary District of the Glenties Union, Co. Donegal.

KEYS, R. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Attendant to the Royal Irish Constabulary, Cloghan, Co. Donegal, vice G. K. Given, M.D., L.R.C.P.Ed., L.R.C.S.Ed., resigned.

LOFTUS, T. R. E., M.B., C.M., L.M., has been appointed an Assistant Colonial Surgeon in the Medical Service of the Government of Ceylon.

MACKINLAY, Mr. J. E. H., has been appointed a Resident Clinical Assistant to the Hospital for Consumption, Brompton, vice Proctor, resigned.

MOFFAT, A. C., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Assistant Medical Officer to the Barony Parish Poorhouse Infirmary and Lunatic Asylum, Barnhill, Glasgow.

OGLESBY, R. P., has been appointed Honorary Ophthalmic and Aural Surgeon to the Leeds General Infirmary.

OWEN, R. E., M.R.C.S.E., has been appointed Medical Officer to the Anglesey County Gaol, Beaumaris, vice R. W. Jones, M.R.C.S.E., resigned.

PALMER, S., M.D., L.R.C.S Ed., has been appointed Medical Officer and Public Vaccinator for District No. 2 of the Newbury Union, Berks, vice Blair.

PATCHETT, H., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Billington District of the Blackburn Union, Lancashire, vice W. Baddeley, M.R.C.S.E., deceased.

PICKLES, Mr. J. J., has been appointed a Resident Medical Officer to the General Infirmary, Leeds, vice J. Brown, M.R.C.S.E., resigned.

SCOTT, J., L.A.H. Dub., has been appointed Apothecary to the Waterford District Lunatic Asylum, vice J. Mackesy, M.D., deceased.

WILLIAMS, Mr. W. H., has been appointed a Resident Clinical Assistant to the Hospital for Consumption, Brompton, vice Duncan, resigned.

WOODS, O. T., M.B., L.R.C.S.I., late Clinical Clerk, West Riding Asylum, has been appointed an Assistant Medical Officer to the Warwickshire Lunatic Asylum, Hatton, vice J. B. Ward, M.D., appointed Resident Medical Superintendent of the Warneford Lunatic Asylum, Oxford.

Births, Marriages, and Deaths.

BIRTHS.

EVANS.—On the 14th inst., at Cheshunt, the wife of Nicholl Evans, M.D., of a son.

HOLMAN.—On the 16th inst., at Reigate, the wife of C. Holman, M.D., of a son.

JONES.—On the 18th inst., at Brookside, Llanfyllin, Montgomeryshire, the wife of J. T. Jones, M.R.C.S.E., of a son.

OLGUIN.—On the 15th inst., the wife of J. Olguin, M.R.C.S.E., of Hinde-street, of a daughter.

THURSTON.—On the 18th inst., at Ashford, Kent, the wife of Edward Whitfield Thurston, L.R.C.P.L., of a daughter.

TOMKINS.—On the 21st inst., at Euston-place, Leamington, the wife of A. Wellesley Tomkins, M.D., of a daughter.

MARRIAGES.

BINGHAM—ROBINSON.—On the 17th inst., at Holy Trinity, Margate, John J. Bingham, L.R.C.P.Ed., M.R.C.S.E., of Alfreton, Derbyshire, to Kate Laura, only daughter of John Robinson, Esq., of Ethelbert House, Margate.

CARMICHAEL—TOMLINSON.—On the 17th inst., at St. Mark's, Winshill, Burton-on-Trent, Wm. Carmichael, M.D., Surgeon R.N., to Sophia Myrtilla, daughter of E. S. Tomlinson, Esq.

DEATHS.

BODINGTON.—On the 17th inst., Wm. Bodington, F.R.C.S., of Kenilworth, aged 82.

GARDNER.—On the 15th inst., at Cheltenham, John Gardner, F.R.C.S.E., Assistant-Surgeon in the Grenadier Guards at Waterloo, aged 82.

GILLARD.—On the 9th inst., F. J. Gillard, M.R.C.S.E., of Barnfield, Newton Abbot, aged 59.

HUNTER.—On the 14th inst., at Ipswich, T. D. Hunter, M.R.C.S.E., aged 69.

LESLIE.—On the 19th inst., D. Leslie, M.D., of Kensington-park-road, aged 63.

LISTER.—On the 23rd inst., at Newton-le-Willows, Ellen Jane, wife of Edward Lister, L.R.C.P.Ed., M.R.C.S.E., of Haydock Lodge, near Newton-le-Willows, Lancashire, aged 40.

WELWITSCH.—On the 20th inst., at Fitzroy-street, Fitzroy-square, Frederick Welwitsch, M.D., aged 65.

Medical Diary of the Week.

Monday, Oct. 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Spencer Watson: "Foreign Body in the Eyeball, necessitating Enucleation." — Dr. Edwards Crisp, "On Two Cases of Hæmorrhagic Small-pox." — Dr. John Cockle, "On the Connexion between Occlusion of the Left Carotid Artery and the Existence of Laminated Clot in the Sac of Aortic Aneurism."

Tuesday, Oct. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Oct. 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Oct. 31.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Nov. 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Nov. 2.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

THE "TEPHRYLOMETER."

DERIVED from the Greek *tephra*, cinerituous, and *hylè*, matter, this is the name given by Mr. H. C. Major, M.B., assistant medical officer at the West Riding Asylum, to an instrument devised by himself for ascertaining the depth of the grey matter of the cerebral convolutions. The "tephrylometer" is a graduated glass tube, open at both extremities. Its length is five inches. The wall of the tube is slightly thicker than that of a goose-quill, except for about a quarter of an inch at one extremity, where it is bevelled off so that the distal orifice has a smooth, sharp margin. At the proximal end the tube wall retains its usual thickness. The graduation, which is on a fiftieth of an inch scale, extends over half the length of the instrument, commencing at a distance of a quarter of an inch from the pierced or bevelled orifice. The graduated lines are made black so as to show distinctly; while each fifth degree—i. e., every ten-inch mark—is larger and more conspicuous than the intermediate ones. The bore of the tube is uniform throughout—the *wall* of the tube should taper, but the *calibre* not. Having fixed on a convolution, the tester of its depth of grey matter holds the tephrylometer between the ring and middle fingers of the right hand, and pierces the convolution vertically and as nearly as possible in the middle line, burying the instrument half its length in the cerebral substance. Still holding the tube as before, the right forefinger is made to descend so as to close the projecting orifice; after this the tube is withdrawn, the hand being retained exactly as in the previous movement. In reading off the number of degrees, an ordinary pocket lens should be used. Mr. Herbert contributes to the second volume of the West Riding Asylum Reports not only an account of the tephrylometer and of its *modus operandi*, but also a series of tables representing the examination of the brain by its means in four cases. These were, respectively, cases of acute mania, senile dementia, chronic mania, and a second case of senile dementia, and the results, for which we refer the reader to Mr. Major's ingenious paper in the West Riding Asylum Reports, are of the highest interest to the pathologist.

Major O'Brien is thanked for his letter. The vestry has saved its credit by overruling the shabby and unwise conduct of the Finance Committee in disallowing Dr. Dudfield's modest charge for cabs. Major O'Brien testifies to the great value of Dr. Dudfield's reports, and regarded with indignation an attempt to refuse Dr. Dudfield £1 6s. 6d. for the use of cabs over a period of three months.

Watch.—The communication shall have our consideration.

CHOLERA IN INDIA.

To the Editor of THE LANCET.

SIR,—I feel bound to admit that you had sufficient authority for the figures in which you stated the relative liability of European and native troops in India to cholera. But as Dr. Bryden's table, referred to by the Army Sanitary Commission, gives the statistics of only *a few selected stations*, it is impossible to deduce from it the relative liability of the two classes of troops *at all the stations* occupied by them jointly, more especially as among the selected stations are included the places that have become notorious for the unhealthiness of their European garrisons. The figures you quoted express the rate correctly as regards the few stations selected for comparison only. Thus in 1867 twenty-four stations, jointly occupied by European and native troops, were affected with cholera; but Dr. Bryden's table refers to only eight of the number.

The Army Sanitary Commission, adopting your view of the meaning of Dr. Bryden's table, ask the question, "If cholera depends on a specific virus, what is the reason that it is thirteen times more fatal to one class of men than to another?" Happily it is very far indeed from being thirteen times more fatal to Europeans than to natives.

I find from Dr. Bryden's table, given in Dr. Cunningham's Report, that the cholera death-rate of European and native troops *at all stations* for the ten years ending in 1870 was 7·71 and 2·4 per 1000 respectively; so that according to those returns the Europeans are only about three, and not thirteen, times more liable than natives to cholera.

If some half-a-dozen great cholera catastrophes, in which the Europeans were obviously exposed to special contamination, were omitted from the calculation, the difference in the degree of liability of the two classes would be very trifling. I believe it will be found that while national habits and mode of living are most important factors in determining the degree of susceptibility to cholera, race, *per se*, has little or no appreciable effect.

Your obedient servant,
October, 1872. A. C. C. DE RENZY, Surgeon-Major.

WHAT BECOMES OF THE CONDEMNED MEAT?

AT the last meeting of the City Commissioners of Sewers, Dr. Letheby, the medical officer of health, in reply to a question, stated that where a seizure of diseased or putrid meat was made, such meat was immediately soaked in carbolic acid, thus rendering it useless for butchers' purposes. It was then conveyed to the Cattle-market at Deptford, where it was steamed in an iron-cylinder, and reduced to the consistence of pulp. The fat-skimming was utilised, and the rest sold for manure. We are glad to find that, in Dr. Letheby's opinion, the fat is never used for butter.

Mr. C. H. Spooner, (Kingston-on-Thames.)—The specimen of professional advertising enclosed by our correspondent is certainly anything but edifying. To reprint it in our columns would only be doing its author too great an honour.

ON THE RELATION OF THE TEETH AND MOUTH TO MENTAL DEVELOPMENT.

DR. LANGDON DOWN, in a paper read before the Odontological Society of Great Britain, made some interesting observations on the above subject. He said that a consideration of mental affections had convinced him that idiocy and imbecility were not simply disturbances of brain-power—were not simply nerve-lesions in the narrowed acceptation of the term, but more profound diseases involving almost every organ and system of organs in the body. If this were so, it followed that an inquiry into the condition of the other organs besides the brain might establish some correlative change in them. With this object in view, the bodily condition of nearly a thousand feeble-minded youth was carefully investigated, and especially the condition of the teeth and mouth. Very few of the cases appear to have had the syphilitic teeth described by Mr. Hutchinson; but where they were present, the confirmatory evidence of a syphilitic history could be traced. Dr. Down had been led to the conclusion that syphilis is not by any means an important factor in the production of congenital mental disease. The honeycombed teeth are perfectly distinct from the syphilitic. Dr. Down thus sums up his observations:—

"We have in the condition of the mouths of idiots important data for distinguishing between idiocy of a congenital and that of a non-congenital origin, and to base thereon a prognosis as to relative improvement by treatment. They are—the thickness of the lower lip; the delay of dentition; premature caries of the teeth; the irregularity of dentition; the chronic inflammation of the gums and buccal mucous membrane; the height, angularity, and want of symmetry of the palatal valve; the long, corrugated, and coarsely papulated tongue, and the hypersecretion of saliva. Common to the congenital and non-congenital cases, we meet with defect of mastication, a want of co-ordination of the muscles of the tongue, and the slight development of the faculty of speech."

Mr. Thomas Alderton.—Our correspondent's treatment of diphtheria contains no methods that have not been employed before, although not with the same measure of success.

X. Y. Z. (Montgomery) is perfectly correct in supposing that the probe was used for the purpose assigned by him.

METROPOLITAN FEVER AND SMALL-POX HOSPITALS.

To the Editor of THE LANCET.

SIR,—My attention has been called to an article among the "Medical Annotations" in THE LANCET of the 12th instant, headed "Metropolitan Fever and Small-pox Hospitals," in which it is stated, "The establishment at Stockwell was opened for small-pox cases at the end of January, and for fever cases in March, 1871, and has received 2041 of the former, and 1958 of the latter."

Permit me to remark that there is a slight inaccuracy herein. There are at Stockwell two hospitals entirely distinct, one for fever, and the other for small-pox, but it is with the former alone that I am concerned. The Fever Hospital was indeed opened on the 6th March, 1871; but, on account of the pressure of the prevailing small-pox epidemic, it was appropriated to the reception of cases of small-pox, and continued to be used for the treatment of no other disease until the end of May, 1872, by which time 1858 cases had been admitted. I am, Sir, yours truly,

WILLIAM RICHARDSON,
October 17th, 1872. House Superintendent.

A CASE OF DISTRESS.

THE sister and nieces of the late Dr. James Laidlaw are in great pecuniary distress at Margate. Dr. Laidlaw was an able member of our profession, and during the cholera epidemic in Barbadoes was sent out by the Government in conjunction with Dr. Gavin Milroy to report upon the outbreak. It appears a very deserving case, requiring urgent assistance, and we are asked to receive subscriptions for the poor ladies.

A Surgeon's Assistant.—1. It is often done.—2. We should consider it sufficient. The employer can, however, propose his own terms; it is for the assistant to say whether he accepts them, and, if so, he must, of course, abide by them.

Mr. H. W. Griffith's friend should place himself in the hands of a surgeon.

THE MEDICAL COUNCIL AND UNQUALIFIED PRACTICE.

To the Editor of THE LANCET.

SIR,—I, in common with others, am very anxious to learn what becomes of the fee of £5 charged by that mysterious body, the Medical Council, for registration. It seems monstrous to charge such a sum, and yet allow unqualified charlatans to practise with impunity, and to the detriment of men who are legally qualified. I was in treaty a short time since for the purchase of a practice in a village, where one man, an ex-chemist and druggist, absorbed all the practice, the only qualified practitioner of the place being too infirm to follow up the work. It is high time that the members of the profession should awake from the state of apathy they have displayed on this subject, and endeavour by means of their parliamentary representatives to have the crying evil of unqualified practice remedied.

I remain, Sir, your obedient servant,
October 21st, 1872. A SURGEON OF ONE YEAR'S STANDING.

DISCOLORATION OF SKIN.

A CORRESPONDENT is desirous of obtaining any practical hints for the removal of a blue mark of the skin, caused by a stain following the application of a lead lotion to an abrasion of the face resulting from an accidental fall.

Student, (Chesterfield.)—The instrument is well made, and would be very suitable for our correspondent's purposes. It is, of course, preferable to have the dearer and more complete one.

C. R. B.—We think that the summons entitles our correspondent to claim a fee.

Mrs. A. Pearse, (Margate.)—The MS. has been received.

"BENEVOLENT" CHARITIES.

A CONTEMPORARY congratulates himself on having objected to the adjective "benevolent" being applied to the Epsom College "from the foundation of that excellent institution." We have only to say that we have objected to the use of the word in such a connexion, not only from the foundation of the Epsom College, but almost from the foundation of THE LANCET itself. The parallel drawn by our contemporary between the Epsom College and the Blue-coat School, St. Paul's, the Charterhouse, Westminster, Winchester, and other foundations, to none of which "benevolent" is applied, has also been anticipated—long before our contemporary's birth. The "previous history" should not be neglected in the annals of journalism any more than in clinical cases.

Holborn-hill.—Our correspondent is entitled to his fee; but occasionally a crotchety judge does not allow it. The rule is to allow it.

Mr. H. P. Newton.—No legal charge can be made.

PROFESSIONAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—Perhaps you will be kind enough to give your opinion on the following.

A resident medical officer (hospital) holds his appointment on condition that he is not to engage in private practice for his own benefit. A physician in the town dies suddenly, and the resident medical officer offers to the representatives of the deceased to conduct deceased's private practice (without fee or reward) till the practice be disposed of to a successor. Resident medical officer's services are accepted, and he conducts the practice till handed over to the successor. The successor comes to the place, but has to return to his former sphere of duty for a month before permanently settling in his new sphere. Resident medical officer volunteers his services as *locum tenens* to successor during that month. Resident medical officer's services are accepted, and he conducts the practice during the month. All fees for attendance by resident medical officer go either to the representatives of deceased or to the successor. Resident medical officer, of course, entirely ceased private practice whenever successor came into residence.

Query,—Was resident medical officer justified, in accordance with the terms of his appointment, in acting as he did? Although the letter of the terms may have been infringed, was not the spirit left intact? Were the governors justified in censuring their medical officer for acting as he did? Did not medical officer act in a Christian, catholic, and professional manner? Your opinion on this will much oblige, Yours, &c.,

October 21st, 1872. M.D.

P.S.—I enclose my card.

*** We do not see that the resident medical officer vitiated the terms of his agreement by acting as he did. On the contrary, it seems to us that he was prompted by a very proper as well as kindly spirit in the course pursued by him. Unless it could be shown that he neglected the duties of his office, we are at a loss to understand the grounds on which he was censured.—ED. L.

THE EAST RIDING LUNATIC ASYLUM.

THIS asylum is now completed, and the last transfers to its walls from Clifton were made a few days since. The building has cost £43,204 odd. Since the opening of the institution last October there have been 259 patients admitted. Of these 17 have died; 47 have been discharged cured, of whom 2 have been readmitted; 2 have been discharged as relieved, and 10 not improved. The average cost per head for the six months ending 30th of June last was estimated at 12*s.* 9½*d.* per week, which sum it is expected will ere long be somewhat reduced.

Dr. N. S. Kerr.—The fees are too small.

THE EXHIBITION OF ETHER AS AN ANÆSTHETIC.

To the Editor of THE LANCET.

SIR,—Dr. Wm. Scott, of Dumfries, in a letter on this subject in your last number, corrects me for stating, as he says, "that Mr. Liston was the first person in this country to exhibit ether previous to an operation." If Dr. Scott refers again to my paper, he will find that my exact words were as follows: "The first operation of magnitude which was performed under ether in this country was an amputation of the thigh by Liston." A few lines before this he will see that I have given Mr. Robinson, the dentist, the credit of being the first in this country to employ ether as an anæsthetic. This was on the 19th of December, the same day on which Dr. Scott exhibited ether. It would be interesting if Dr. Scott would tell us the nature of the operation to which his patient was subjected.

I am, Sir, your obedient servant,

Wimpole-street, October, 1872. G. V. POORE.

Historicus.—There were two eminent zoologists of the name of Geoffroy Saint-Hilaire, father and son. The former of these, Etienne, founded the zoological collection at the Jardin des Plantes, Paris. He died in 1844; his son, Isidore, in 1861.

R.—We do not see that the altered question requires a different answer. Let it be remembered that the whole question is a very slight one, and that no charges of unprofessional behaviour can be based on such a foundation.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—The appeal you kindly inserted on behalf of the poor doctor under my care, with a wife and three children, and who, through illness, has lost the means of subsistence, elicited a donation of 2*s.* 6*d.* sent to me from your Office, and one of two guineas from Matlock Bath, which I beg to acknowledge with many thanks. As the case is, in every respect, worse than when I wrote my appeal, I earnestly hope that further donations may yet be forwarded either to THE LANCET Office or to my address.

7, Trinity-square, S.E., Oct. 16th, 1872. D. HOOPER, B.A., M.B.

DR. HARDWICKE'S SANITARY REPORT OF PADDINGTON FOR THE YEAR 1871-72.

THE vestry of Paddington are much to be congratulated on the flourishing condition of the parish. The population has risen from 96,784 to 98,884; the death-rate is 1·2 (per thousand living) less than in 1870-71, while the birth-rate shows an increase of 1·8. During the same period this annual Sanitary Report has more than doubled its size—a fact which we suppose indicates that sanitary energy is on the increase. Dr. Hardwicke complains that the difficulty of compiling statistics is very greatly increased by the many methods which are employed for subdividing the metropolis.

Assist.-Surgeon Grant.—They may be procured through any medical publisher.

Dr. R. McNab.—We know of no cases in point.

LOST POCKET-CASE.

To the Editor of THE LANCET.

SIR,—There was stolen from my consulting-room on the evening of October 4th last a dark-green morocco surgical instrument pocket-case, with bright green elastic band. If any of your readers happen to have purchased such a case, presented to their notice probably with some plausible story, and would communicate with me, on identifying the same I would indemnify them for all expenses incurred, and it might lead to the conviction of the offender, and thus be of benefit to our brethren in the metropolis, who are exposed continually to the same sort of robbery.

Yours truly,

2, Victoria-park-road, E., Oct. 19th, 1872. JAS. C. BYLES.

Mr. J. H. Salter.—A great many gentlemen received the degree in 1862, but only after a fair examination.

Dr. Walter Lyon.—Divide the receipts.

CHARGE AGAINST A MIDWIFE.

WE have received particulars of this serious case at so late an hour that we shall defer comment on it till next week.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson; Mr. Jabez Hogg; Mr. Carter; Dr. Julius Pollock; Dr. Matthews Duncan, Edinburgh; Dr. Maunsell; Mr. Eady; Mr. T. Holmes; Dr. Roth, Dresden; Dr. Paulson, Mountsorrel; Dr. Lee, jun.; Mr. Lawrence; Mr. J. H. Salter, Kelvedon; Mr. Newton; Mr. Henry, Taunton; Mr. R. Sheard, Morden; Mr. Evans, Thirsk; Dr. Bodington, Sutton Coldfield; Mr. Scudamore; Dr. Newth, Hayward's Heath; Mr. Bennett; Dr. Cory, Buckhurst Hill; Mr. Webber, Carlisle; Mr. Henry Mayhew; Mr. T. Alderton, Reepham; Dr. Stewart, Mossley; Mr. Walter; Mr. J. C. Jones; Mr. Forbes, Shanklin; Mr. Gliddon, Colney Hatch; Dr. Macpherson; Mr. Benson; Mr. Jacobs, Nottingham; Mr. Thomas, Edgbaston; Mr. Baynes, Foxton; Mr. James, Bournemouth; Mr. Corfield, Hulme; Mr. R. Brotherton; Mr. Somerville; Mr. Groves; Mr. Eastlake; Dr. Tompkins, Leamington; Mr. Crompton, Salford; Dr. Vyse, Cheltenham; Mr. Bird, York; Mr. T. Gilbert, Ipswich; Dr. Myles, Bolton; Mr. Caulfield; Mr. Morton, Petersfield; Mr. Palmer, Oakham; Mr. J. O'Connor, Belfast; Dr. Walker; Mr. Blogg, Canterbury; Mr. Oglesby, Leeds; Dr. Fain; Dr. Phillips; Mr. M'Clure; Mr. Spooner; Dr. Dickson, Buxton; Mr. Griffiths; Mr. Thurston; Dr. Russell, Birmingham; Mr. Hedley; Mr. Bowtell; Mr. Green; Dr. Otis, New York; Mr. Bowes; Mr. Price; Mr. Rigby; Dr. Dougall, Glasgow; Mr. R. Coles; Dr. Gillies, Melksham; Mr. Grant, Cork; Mr. Holland; Dr. Loftus, Edinburgh; Mr. Hughes; Mr. R. Morgan, Chepstow; Mr. Jones, Llanfyllin; Mr. French, Bristol; Mr. Dunbar; Mr. Ward, Scarborough; Mr. Byles; Dr. Stiff, Nottingham; Mr. Edwards; Mr. Leighton; Mr. Williams, Manchester; Mr. Bowes, Turner's Hill; Dr. Daly, Dalston; Mr. R. P. Smith, Stockport; Mr. Stewart; Dr. D. Okuneff, St. Petersburg; Dr. Harrison, Handsworth; Dr. Kerr, Dunstable; Dr. Borham, Halstead; Dr. Woods, Wakefield; Mr. A. C. Hutchings; Dr. Hardie; The Governor of Newgate; C. A. B.; Historicus; R.; A Surgeon's Assistant; Inquirer; Students; M.D.; A Surgeon of One Year's Standing; M.R.C.S.; X. Y. Z.; Nemo; A Subscriber of Twenty-two Years; Holborn-hill; &c. &c.

Manchester Guardian, Porcupine, Parochial Critic, Journal de Médecine, Liverpool Daily Albion, Guy's Hospital Gazette, Berkshire Chronicle, Reformer, Newcastle Daily Chronicle, Canada Medical Journal, Whitehaven News, Chicago Times, Orkney Herald, Revista Medico-Quirurgica, Orcadian, Dublin Evening Mail, Co-operative News, Oil Paint and Drug Reporter, Brecon County Times, and *European Mail* have been received.

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